STATEMENT OF QUALIFICATIONS

 Submitted to

 General Excavation, Inc.
 540.439.2202

 Design-Build Project

 Route 3 Widening
 Culpeper County

 State Project No.: 0003-023-107, P101, R201, C501
 Federal Project No.: STP-023-7(024)
 Contract ID No.: C00014657DB56

 January 25, 2013

 Contact:
 Mr. Scott Hunter
 Vice President
 General Excavation, Inc.
 540.439.2202
**ATTACHMENT 3.1.2**

**Project: 0003-023-107, P101, R201, C501**  
**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

Offerors shall furnish a copy of this Statement of Qualifications (SOQ) Checklist, with the page references added, with the Statement of Qualifications.

<table>
<thead>
<tr>
<th>Statement of Qualifications Component</th>
<th>Form (if any)</th>
<th>RFQ Cross reference</th>
<th>Included within 15-page limit?</th>
<th>SOQ Page Reference</th>
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<tr>
<td>Statement of Qualifications Checklist and Contents</td>
<td>Attachment 3.1.2</td>
<td>Section 3.1.2</td>
<td>no</td>
<td>i-iii</td>
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<td>Acknowledgement of RFQ, Revision and/or Addenda</td>
<td>Attachment 2.10 (Form C-78-RFQ)</td>
<td>Section 2.10</td>
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<td>iv</td>
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<td>Letter of Submittal (on Offeror’s letterhead)</td>
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<td>1-2</td>
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<td>Offeror’s point of contact information</td>
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<td>Affiliated/subsidiary companies</td>
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<td>Debarment forms</td>
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<td>Evidence of obtaining bonding</td>
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<td>SCC and DPOR registration documentation (Appendix)</td>
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<td><strong>DBE statement within Letter of Submittal</strong> confirming Offeror is committed to achieving the required DBE goal</td>
<td>NA</td>
<td>Section 3.2.11</td>
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<td><strong>Offeror’s Team Structure</strong></td>
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<td>Key Personnel Resume – DB Project Manager</td>
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<td>Key Personnel Resume – Quality Assurance Manager</td>
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<td>Section 3.3.1.2</td>
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<td>Section 3.3.1.5</td>
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## ATTACHMENT 3.1.2

**Project: 0003-023-107, P101, R201, C501**  
**STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS**

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**Experience of Offeror’s Team**

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<tr>
<th>Lead Contractor Work History Form</th>
<th>Attachment 3.4.1(a)</th>
<th>Section 3.4</th>
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**Project Risk**

| Identify and discuss three critical risks for the Project        | NA                  | Section 3.5.1        | yes                            | 11-15               |
ATTACHMENT 2.10

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

RFQ NO. C00014657DB56
PROJECT NO.: 0003-023-107, P101, R201, C501

ACKNOWLEDGEMENT OF RFQ, REVISION AND/OR ADDENDA

Acknowledgement shall be made of receipt of the Request for Qualifications (RFQ) and/or any and all revisions and/or addenda pertaining to the above designated project which are issued by the Department prior to the Statement of Qualifications (SOQ) submission date shown herein. Failure to include this acknowledgement in the SOQ may result in the rejection of your SOQ.

By signing this Attachment 2.10, the Offeror acknowledges receipt of the RFQ and/or following revisions and/or addenda to the RFQ for the above designated project which were issued under cover letter(s) of the date(s) shown hereon:

1. Cover letter of RFQ 12/04/2012
   (Date)

2. Cover letter of RFQ Addendum No. 1 01/11/2013
   (Date)

3. Cover letter of __________________________
   (Date)

[Signature] 1/25/2013

SIGNATURE DATE
SECTION 3.2- LETTER OF SUBMITTAL

Mr. Joseph A. Clarke, P.E.
Alternate Project Delivery Office
Virginia Department of Transportation
1401 East Broad Street
Richmond, VA 23219

Re: Route 3 Widening, RFQ No.: C00014657DB56

Dear Mr. Clarke:

VDOT is looking for a design-build team to design and construct the $39-million, Route 3 Widening project located in Culpeper County. The project involves the widening of a five-mile segment of Route 3 to a four-lane divided highway to improve safety. GEI (General Excavation Inc.) and its designer, Volkert (Volkert, Inc.) have the experience, skilled engineers, project knowledge, construction staff, equipment, and resources to provide VDOT with superior design-build services. We have thoroughly reviewed the RFP Information Package, plans, and addendum; visited the project site; and studied the issues and are prepared to implement this project for VDOT efficiently and effectively.

GEI is a full service prime contractor that has been constructing transportation infrastructure for VDOT for 30 years. Located in Warrenton — just 25 minutes from the Route 3 Widening project site — GEI has more than 200 employees and annual revenues exceeding $30 million. The firm has received Excellence in Construction awards from VDOT for seven projects in the past five years. Recent VDOT design-build experience includes the Pacific Boulevard Widening project in Loudoun County.

Volkert (Volkert, Inc.) has teamed with GEI to provide design services for the Route 3 Widening project. Volkert is a multidisciplinary engineering firm that has been designing transportation infrastructure for VDOT for 31 years. Volkert worked closely with the Culpeper District to design the Public Hearing plans for the Route 3 Widening project and has an in-depth knowledge and understanding of the project issues and requirements. Volkert has provided design and quality assurance services for design-build projects in Virginia ranging in size up to $207 million.

SECTION 3.2.1- Full Legal Name and Address of the Offeror
General Excavation, Inc. // 9757 Rider Road // Warrenton, VA 20187

SECTION 3.2.2 – Point of Contact for the Offeror
Mr. Scott C. Hunter, Vice President // 9757 Rider Road // Warrenton, VA 20187
(TEL)540-439-2202 // (FAX)540-439-3795
Email: shunter@gei-va.com

SECTION 3.2.3 – Principal Officer of the Offeror
Mr. Scott C. Hunter, Vice President // 9757 Rider Road // Warrenton, VA 20187
(TEL)540-439-2202
SECTION 3.2.4 – Offeror’s Corporate Structure/Financial Responsibility
General Excavation, Inc. is a Virginia Corporation. General Excavation, Inc. shall take full financial responsibility for the Project. There are no liability limitations.

SECTION 3.2.5 – Full Legal Name of Lead Contractor and Lead Designer
Lead Contractor: General Excavation, Inc.
Lead Designer: Volkert, Inc.

SECTION 3.2.6 – Affiliated/Subsidiary Companies of the Offeror
General Excavation, Inc. does not have any affiliated and/or subsidiary companies.

SECTION 3.2.7 – Certificate Regarding Debarment Forms
The Certificate Regarding Debarment Form(s) Primary Covered Transactions and Certificate Regarding Debarment Form(s) Lower Tier Covered Transactions is provided in Attachment 1.

SECTION 3.2.8 – Offeror’s VDOT Prequalification Number and Current Status
General Excavation, Inc.’s prequalification number is G181. General Excavation, Inc.’s prequalification status is active. A copy of the prequalification certificate is found in Attachment 1.

SECTION 3.2.9 – Surety or Insurance Company Letter
The required Surety or Insurance Company letter stating that the General Excavation, Inc. is capable of obtaining a performance and payment bond based on the current contract value is provided in Attachment 1.

SECTION 3.2.10 – Virginia State Corporation Commission (SCC) and Virginia Department of Professional and Occupational Regulations (DPOR)
DPOR Licenses and SCC Registrations are provided in Attachment 2.

SECTION 3.2.11 – DBE Participation Goal
General Excavation, Inc. commits to achieving a DBE participation goal of 20%.

Scott C. Hunter, Vice President
General Excavation, Inc.

Should you have any questions, need clarification or require additional information

Sincerely,
GENERAL EXCAVATION, INC.

Scott C. Hunter,
Vice President
3.3 OFFEROR’S TEAM STRUCTURE

General Excavation, Inc. (GEI) has assembled a design-build team composed of highly qualified firms with ample VDOT experience and capacity to perform superior design-build services for VDOT. The team will function as a unified organization, working collaboratively and proactively to make sure that VDOT’s goals for function, time, cost, and quality are met. This section will demonstrate how the GEI team is structured and how key personnel will work together including the role of each and the reporting and communication relationships. GEI team members include:

<table>
<thead>
<tr>
<th>Company</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Excavation, Inc. (GEI)</td>
<td>Prime Offeror, General Contractor</td>
</tr>
<tr>
<td>Volkert, Inc. (Volkert)</td>
<td>Lead Designer, QAM, ROW Manager, Public Outreach</td>
</tr>
<tr>
<td>Utility Professional Services, Inc. (UtilityPros)</td>
<td>Utility Manager</td>
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<tr>
<td>EBA Engineering, Inc. (EBA)</td>
<td>Construction Quality Control</td>
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<tr>
<td>EM Technologies, Inc. (EM Tech)</td>
<td>Quality Control Testing Laboratory</td>
</tr>
<tr>
<td>Appraisal Review Specialist</td>
<td>Appraisal Reviews</td>
</tr>
<tr>
<td>Crider &amp; Associates, Inc.</td>
<td>Appraisal Services</td>
</tr>
<tr>
<td>McCormick &amp; Taylor</td>
<td>Environmental Permitting and Compliance</td>
</tr>
<tr>
<td>H&amp;B Surveying &amp; Mapping, L.L.C.</td>
<td>Survey &amp; Acquisition Documents</td>
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SECTION 3.3.1 – KEY PERSONNEL

Key personnel are identified below along with a summary of relevant experience. Detailed information about the key personnel is included in Attachment 3.3.1 – Key Personnel Resume Forms

Design-Build Project Manager  Scott C. Hunter  GEI  26 Years of Experience
Our Design-Build Project Manager (D-B PM), Scott C. Hunter, has 26 years of experience in heavy highway construction. Mr. Hunter was the D-B PM for GEI’s Pacific Boulevard Widening Design-Build project, substantially completed and delivered to VDOT’s Northern Virginia District in July 2011. Mr. Hunter, in a senior management role, has delivered similar projects throughout the Commonwealth to VDOT including the $46 million I-95/ Route 627 Interchange project in Stafford and the $38 million I-66 HOV widening project between Route 234 Business and the Route 234 Bypass.

Quality Assurance Manager  William McDowall, P.E.  Volkert  32 Years of Experience
The team’s Quality Assurance Manager (QAM), Mr. William McDowall, P.E., has 30 years of combined experience in heavy highway construction, construction engineering, and quality assurance (QA) for VDOT projects. He has served as QAM on VDOT projects including the I-66 Rehabilitation D-B project and worked closely with GEI during construction of the Sycolin Road Widening and the Leesburg Park and Ride Lot for Loudoun County.

Design Manager  Phil Lohr, P.E.  Volkert  17 Years of Experience
The team’s Design Manager, Mr. Phil Lohr, P.E., has 17 years of experience and has managed design services for major corridor improvement and widening projects. His experience includes roles as the Project Manager for the development of Public Hearing plans for the $39-million Route 3 Widening in the Culpeper...
3.3  Offeror’s Team Structure

District and lead Civil Design Manager for the $207-million Martin Luther King Expressway Extension PPTA project in Portsmouth. He is experienced in and responsible for coordination of all design disciplines and leading multidisciplinary teams in the development of quality design plans.

<table>
<thead>
<tr>
<th>Construction Manager</th>
<th>Page Gallihugh</th>
<th>GEI</th>
<th>23 Years of Experience</th>
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<tr>
<td>Our Construction Manager, Mr. Page Gallihugh has 23 years of experience in heavy highway construction. Mr. Gallihugh was the general superintendent overseeing all field operations associated with GEI’s Pacific Boulevard Widening Design-Build project. Mr. Gallihugh, in a management role, has delivered similar projects to the VDOT including the $14-million Route 208-Courthouse Road project in Spotsylvania and the $12-million University Boulevard project in Gainesville.</td>
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<table>
<thead>
<tr>
<th>Utility Coordination Manager</th>
<th>Frederic Howe</th>
<th>UtilityPros</th>
<th>30 Years of Experience</th>
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<tr>
<td>Our Utility Coordination Manager, Mr. Frederic Howe, has 30 years of experience in regulated, electrical, telecommunications, and gas utilities including more than 20 years with Virginia / Dominion Power. His expertise includes management, coordination, and design. He managed utility relocations for the Route 3 widening D-B project in Spotsylvania County. Mr. Howe and his staff will provide a single point-of-contact to the dry utility companies, thus allowing other key personnel and support staff to focus on performing and completing their responsibilities to the project.</td>
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<table>
<thead>
<tr>
<th>Right of Way Manager</th>
<th>Debra Moore</th>
<th>Volkert</th>
<th>22 Years of Experience</th>
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<td>The team’s Right of Way Manager, Ms. Debra Moore, has 22 years of experience providing right of way acquisition services for public transportation projects. Ms. Moore worked in the VDOT Right of Way Division including serving as the Assistant Manager. As the Assistant Manager, she was responsible for managing all aspects of the negotiation and legal functions in the Northern Virginia District.</td>
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<table>
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<tbody>
<tr>
<td>In addition to the key personnel, the GEI team includes additional staff that will play a substantial role in the success of the project. Information on the additional significant staff and relevance of each role is provided in the following.</td>
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The **Public Outreach Manager, Martha Kemp**, will develop the public relations / communications plan. She will report directly to the D-B PM and will work collaboratively with the Design Manager for the development of the communications plan as part of the Transportation Management Plan (TMP). Ms. Kemp has more than 20 years of experience working with public agencies to develop and implement public outreach programs for transportation projects. Most recently she worked with VDOT to develop and implement the public relations plan for the I-66 Rehabilitation D-B project.

The **Environmental Compliance Manager, Brennan Collier**, is a significant position due to the project’s location next to historic battlefields, cultural resources, and wetlands. The Environmental Compliance Manager will confirm compliance with the MOA commitments during design and construction and assist with resolving and mitigating potential unknown environmental issues including additional coordination with VDOT and regulatory agencies. Ms. Collier has more than 16 years of experience managing environmental studies and preparing NEPA documentation for transportation projects in Virginia. Prior to joining McCormick Taylor, Ms. Collier was a NEPA Document Specialist for VDOT’s Northern Virginia District and an Environmental Program Manager in VDOT’s Central Office.

**Administrative Project Manager, Brian Harris**, will assist the D-B PM in facilitating dialogue between the design, governmental review agencies, third party participants and the construction team and conduct
construction administrative functions including contract administration, purchasing, project scheduling, coordination of suppliers and subcontractors, and assisting in management of field construction activities. Mr. Harris has more than 25 years of experience managing engineering and construction disciplines, including administration of contracts and schedules.

The **Construction Quality Control Manager (QCM), Kenneth Shirley, PE** will work on behalf of GEI to make sure construction complies with the contract documents and “approved for construction” plans. The QCM will report directly to the Construction Manager and maintain a proactive, transparent working relationship with the QAM to resolve non-compliance issues. Mr. Shirley has significant construction knowledge and experience in the Culpeper District having served as the District Construction Engineer.

The **Project Safety Director**, Harry Newlin, will report to the D-B PM and will identify safety concerns and risks. He will visit the project site on a regular basis to confirm safety compliance in accordance with GEI health, safety and welfare plan and will communicate his findings with the Construction Manager. Mr. Newlin’s experience includes the day-to-day safety activities related to ongoing construction operations including monitoring for potential safety hazards, new hire orientations and safety briefings. He has experience with OSHA requirements.

**SECTION 3.3.2 – ORGANIZATION**

The organization chart below represents the structure of the GEI team. The thick black lines reflect the reporting relationships between the key personnel. The thin black lines reflect the reporting relationships between the support personnel required on the project. The dashed red lines reflect open lines of communication between the various members of the team and stakeholders.
3.3 Offeror’s Team Structure

Organizational Structure

VDOT’s Project Manager will coordinate the administration of the contract and other matters related to the project with the D-B PM. In addition to the D-B PM, VDOT will interact directly with the QAM and third party stakeholders and representatives. It is understood that from time to time the VDOT PM may need access to other members of the GEI team. If such access is requested it shall be provided through direct communication or indirectly through the D-B PM at the discretion and desire of VDOT.

Design Build Project Management Team

Scott Hunter, the D-B PM, will be VDOT’s single point-of-contact and will bear full responsibility for the successful completion of the project. He will have authority over all aspects of the GEI team including construction and design. He will be responsible for contract management, coordination of all disciplines, and support to VDOT for communication with third parties.

Key personnel on the design-build project management team include the QAM, Design Manager, Construction Manager, Utility Coordination Manager, Right of Way Manager, with support from others including the Safety Director and Public Outreach Manager. Mr. Hunter will work directly with the Design Manager and the Construction Manger to oversee the development of the schedule and final plans. During final design, he will ensure that all permits are obtained. He will work with the Utility Manager and the Right of Way Manager to confirm that the right-of-way and easements are secured prior to construction. He will oversee the construction activities and coordinate with the QAM to ensure that all work conducted is in accordance with approved for construction plans and specification. He will work with the VDOT’s Project Manager and the QAM to facilitate the final inspection and audit of the QA/QC records.

Quality Assurance Team

William McDowall, P.E., the QAM, will manage the QA program including the development of the QA/QC plan (in collaboration with design, construction, and QC managers) and independent QA inspection and testing. He will directly supervise the QA inspectors and testing technicians and coordinate with the independent testing laboratory. Mr. McDowall will make sure that design and construction complies with the contract documents. Although he will report to the D-B PM, he has the autonomy and authority to suspend construction when non-compliance issues are identified and report his findings directly to VDOT as well as the DB-PM. He will communicate directly with the D-B PM to resolve non-compliance issues and assure corrective actions are implemented and effective. Mr. McDowall will also interact with VDOT for the scheduling and performance of OIA/OVST inspections.

The QA inspectors and testing technicians shall report directly to the QAM. They will work independently from the QC personnel. QA inspections and testing frequencies will occur as directed by the QAM and in compliance with the QA/QC plan. The QA testing lab will be independent from QC testing.

Design Team

Phil Lohr, P.E., the Design Manager, will report directly to the D-B PM and manage the development of the final design plans involving coordination of all of the design disciplines including survey, environmental, geotechnical, roadway, structural, hydraulic, traffic engineering, and design QC. He must also coordinate with the right-of-way and utility coordination managers to make sure design plans incorporate the requirements of right of way acquisition and utility relocations/improvements. In addition, he will work with the QAM to develop the design QA/QC plan and implement and monitor the plan. Mr. Lohr will work collaboratively with the Construction Manager regarding items of special importance including the development of the schedule, sequence of construction plans and work packages. He will stay involved
3.3 Offeror’s Team Structure

throughout construction to assist with the resolution of field issues and to address RFIs and review shop drawings. The following design personnel will report directly to Mr. Lohr.

- The Design QC Manager will implement the protocols of the design QA/QC plan.
- The Environmental Permitting and Compliance Manager will make sure the design meets the MOA commitments and will work with the Design Manager to mitigate potential environmental issues not covered by the FONZI.
- The Roadway Designer will be responsible for completing the design for the road and submission of the final plans to the review agencies. The roadway designer will work closely with the Design QC Manager to confirm the plans are prepared in accordance with the contract and design QC plan.
- The MOT/TMP Designer will be responsible for development the TMP plan in collaboration with the Construction Manager.
- The Geotechnical Engineer will verify the findings of the Geotechnical Data Report and identify geotechnical limitations on the project prior to construction mobilization.

### Construction Team

**Page Gallihugh, the Construction Manager**, will report directly to the D-B PM and will be on the project site for the duration of construction operations. He will oversee project construction activities and the work of the Quality Control Manager, Administrative Project Manager, and the Construction Superintendent. He will work collaboratively with the design team during the development of the construction plans, with special focus on the schedule, sequence of construction, and TMP. He will conduct a constructability review and make recommendations during the design phase of the project. At the construction site, Mr. Gallihugh will oversee the TTC operations during construction ensuring that all lane closures, traffic shifts, and transitions are in full compliance with the TMP, *Manual of Uniform Traffic Control Devices* and the latest version of the *Virginia Work Area Protection Manual*. He will interface with the QAM during the development of the construction QA/QC plan. The following construction personnel will report directly to Mr. Gallihugh.

- The Construction QC Manager will oversee the QC inspections and tests and ensure QC inspections are carried out in accordance with the construction QA/QC plan and tests are performed at intervals as required. This function will be separate from QA.
- The Administrative Project Manager will support the Construction Manager in providing contract administration, purchasing, overseeing the project scheduling and controls, coordination of suppliers and subcontractors, and assisting in the management of field personnel
- The Construction Superintendent will oversee the day-to-day field operations; notify the Construction Manager of equipment, materials, and labor needed to complete certain tasks; and adhere to the construction QC plan. In addition, he will manage the work of foreman.

### Utility Coordination Team

**Fred Howe, the Utility Coordination Manager** will report directly to the D-B PM and will have direct lines of communication to the Design Manager and Right-of-Way Manager during the advanced design stages of the utility coordination and relocation/improvement effort. Mr. Howe will have a direct line of communication with the Construction Manager during construction. If it is determined that utilities require relocation or improvements prior to construction, the Utility Coordination Manager and Construction Manager shall develop a plan to expedite the work. The utility coordination team will coordinate private utility relocations and improvements. The team will accurately identify utilities within the project limits regardless of impacts. Once the utilities are identified, they will work with the design team to identify conflicts and determine the most appropriate means to mitigate them. Members of the utility coordination
team will be the point of contact for the dry utility companies during the life cycle of the project. The following utility coordination personnel will report directly to Mr. Howe.

- The Communications Engineer will be responsible for overseeing the coordination, design, and construction of the communication lines that are in conflict and require relocation.
- The Electrical Engineer will be responsible for overseeing the coordination, design, and construction of the electrical lines that are in conflict and require relocation. In addition, if the advanced speed limit signs require power instead of operating by solar panels, the electrical engineer shall coordinate the design and construction of the electrical service.
- The Gas Engineer will be responsible for overseeing the coordination, design, and construction of the gas lines that may be in conflict and require relocation.

Right-of-Way Team

Debra Moore, the Right-of-Way Manager, will report directly to the D-B PM and will have open lines of communication to the Design Manager and Construction Manager. Communication during preparation of the construction plans between the Right of Way Manager and Design Manager is critical to assure that agreements reached with property owners will be incorporated into the design and proper coordination will be achieved between the acquisition plats and construction plans. Likewise, communication with the Construction Manager is critical to verify that the intent of agreements is properly implemented in the field. The following right-of-way personnel will report directly to Ms. Moore.

- The Appraiser will review property records to determine the values for the right of way area to be acquired. This position shall be independent of the Appraisal Reviewer.
- The Appraisal Reviewer will review and approve the appraisals. The Appraisal Reviewer is from an independent firm not associated with the appraiser.
- The individual responsible for negotiations will be responsible for presenting the offer to acquire right of way to the property owner based on the approved appraisals.
- The Settlement/Title Company will conduct title research and acquisition closings.
- The individual responsible for acquisition documents will coordinate areas required for right of way and easement takes and report changes occurring to the design that impact areas required for acquisition.
3.4 EXPERIENCE OF THE OFFEROR’S TEAM

GEI and Volkert have more than 30 years of experience working on VDOT projects. A summary of experience for each of the key companies on the team is presented below:

**GENERAL EXCAVATION, INC. (GEI)** is a family-owned full service general contractor founded in February 1983. GEI has constructed many projects for VDOT’s Culpeper District including the Route 3 widening project (completed January 1999) that connects to the east end of this project. GEI has successfully delivered both design-build and bid-build projects of similar scope in the NOVA District including the recently completed Pacific Boulevard Widening design-build project in Loudoun County, the Advanced Detour and Access Road Construction for Phase IV – I66/Route 29 Linton Hall Road Interchange ($10.4 million), and Route 234/Lake Jackson Improvements ($14 million). GEI’s portfolio of projects completed in and around the Culpeper District is a direct reflection of our considerable local knowledge and reputation for delivering quality projects on time and within budget. GEI will perform the majority of the construction tasks for this project with the exception of the bituminous asphalt paving and concrete flatwork associated with curb, gutter and medians. For additional information regarding GEI’s experience please refer to Attachment 3.4.1 a.

**VOLKERT, INC. (Volkert)** is a full service engineering firm founded in 1925. Volkert has provided design, construction engineering inspection, and right-of-way acquisition services for VDOT for 30 years. Volkert worked closely with the Culpeper District to design the Public Hearing plans for this Route 3 Widening project and has an in-depth knowledge and understanding of the project issues and requirements. Volkert’s VDOT experience includes seven design-build and PPTA projects ranging in size up to $207 million. Volkert is the civil engineer for the design of the Martin Luther King Expressway Extension PPTA project and the I-66 Rehabilitation D-B project. With 120 engineers and field personnel in Virginia, Volkert has the expertise, experience, and full time staff to provide the design, quality assurance, and right-of-way acquisition services in a timely manner and on schedule. Additional information regarding Volkert’s experience is in Attachment 3.4.1 b.

**UTILITY PROFESSIONAL SERVICES, INC. (UtilityPros)** is a full service utility engineering firm located in Fredericksburg. Founded in 2002, UtilityPros provides turn-key dry utility engineering and project management services for relocation and new service projects and brings value-added reviews, experience, and management to all stages of the project. Its project management staff consists of former utility company employees with many years of experience in regulated electrical, gas, and telecommunications utilities. Fred Howe, the Principal of UtilityPros and the GEI team’s Utility Coordination Manager, has more than 20 years working for Virginia / Dominion Power. Recent transportation projects include the management of utility relocations for the Route 3 widening D-B project in Spotsylvania County and the Columbia Pike project for Arlington. UtilityPros is certified as a DBE/WBE through the Virginia Unified Certification Program and certified as a SWaM by the VDMBE.

**EBA ENGINEERING, INC. (EBA)** is a multidisciplinary engineering firm that has provided construction management, inspection and materials testing for VDOT projects for more than 10 years. The firm’s VDOT experience includes contracts in the Bristol, Salem, Richmond, Hampton Roads, Fredericksburg, and Northern Virginia districts. Services provided to VDOT include inspecting road, bridge, and maintenance projects managed from their offices in
3.4 Experience of the Offeror’s Team

Fredericksburg and Nellysford. Design-build experience includes QC inspection on multiple sections of Maryland's Inter-County Connector Design-Build project. Their staff includes inspectors with VDOT certifications in materials testing and safety. EBA is a VDMBE-certified DBE and SWaM firm.

McCORMICK TAYLOR (MT) is a full-service engineering firm founded in 1946. The firm conducts a variety of environmental studies and prepares NEPA documentation through multiple on-call environmental contracts with VDOT, including a statewide noise abatement contract. MT’s environmental personnel have resolved complex environmental issues and minimized known and unknown risks for large and small projects such as the Charlottesville Bypass, Edwards Ferry Road, Port Republic Road widening, I-64 improvements (Hampton to Richmond), I-81 improvements, and the Coalfields Expressway. In addition, the firm has seen a number of projects through to construction and beyond via the design-bid-build and design-build processes. On this project, MT’s water resources, cultural resources, and noise staff will be critical to moving the project forward and seeing its construction completed.

RELEVANT WORKING RELATIONSHIPS

In addition to our qualifications and experience, members of the GEI team were chosen for the Route 3 Widening design-build project based on past working relationships between firms and individuals. GEI was the prime contractor on several projects where Volkert performed construction engineering and inspection. Those projects include the recently completed Route 691 Jarmans Gap Road improvements in Albemarle County, Sycolin Road widening and Leesburg Park & Ride Lot in Loudoun County, and the Route 644 widening project in Rockingham County.

In addition to the firm relationships, several individual members of the GEI team have established prior working relationships in similar capacities. Scott Hunter and William McDowall attended the Transportation Construction Management Institute (TCMI) together and coordinated the close-out of the Fairfax County Parkway Extension project when Mr. Hunter worked with Moore Brothers Company (MBC) and Mr. McDowall served as the Assistant State Construction Engineer for VDOT. Mr. Hunter worked with Mr. Shirley on the I-95/627 Interchange project in Stafford County while Mr. Hunter was with MBC and Mr. Shirley was the Fredericksburg District Construction Engineer for VDOT. Mr. Hunter and Mr. Gallihugh led the GEI management team on the Route 691 Jarmans Gap Road project in Albemarle County, and both the Route 672 and Route 644 improvement projects in Culpeper County working with Mr. Shirley while he served as the Culpeper District Construction Engineer for VDOT.

These established relationships have a proven track record of delivering environmentally compliant projects on-time and within budget and will be utilized as the foundation for the team to deliver the Route 3 Widening project.
RISK # 1 – ENVIRONMENTAL RISK

Why the Risk is Critical
During the preliminary engineering phase of the project, environmental studies were conducted and a NEPA document in the form of an Environmental Assessment was prepared, resulting in a Finding of No Significant Impact (FONSI). The FONSI summarized the environmental issues that were cleared and outlined additional tasks and issues that were still outstanding. In particular, it documented environmental commitments made on the project during preliminary engineering. Each of these commitments must be upheld during final design and construction. Should these issues be modified or removed from the project design, additional coordination with VDOT and FHWA would be necessary.

Environmental commitments include the following:
- Specific acreages of right of way to be acquired from the Rose Hill and Salubria Virginia Outdoors Foundation easements were noted. Should the amount of right of way from these easements increase, additional coordination will be required.
- Equestrian and pedestrian refuge and crossover areas have been incorporated into the project designs.
- To avoid adverse effects to the Battle of Brandy Station and the Brandy Station Battlefield Historic District, the proposed median width has been reduced within the historic National Register boundaries so that it is no greater than 16 feet. Additionally, the alignment has been shifted to avoid Hansbrough’s Ridge, safety improvements have been proposed, and turn-lane storage and radii have been reduced.
- Specific acreages of right of way to be acquired or utilized from the Morton’s Ford Battlefield, Mount Pony Rural Historic District, Clover Hill and Salubria were noted. Should the amount of right of way from these historic properties increase, additional coordination will be required.
- The contractor should follow VDOT’s Design Manual and Road and Bridge Specifications, DEQ air pollution regulations, Virginia Erosion and Sedimentation Control regulations, Virginia Stormwater Management regulations.
- Practical measures to minimize harm to wetland will be implemented as part of the project.
- Disturbed areas will be re-vegetated using appropriate grass seed mixes following construction.
- If contaminated soils are discovered during construction, the contractor must develop and implement proper management procedures through coordination with the regulatory agencies or special provisions.
- There are a number of temporary construction impacts anticipated and outlined in the FONSI that need to be controlled, minimized or mitigated.

In addition to those commitments listed above, there are also issues that were not addressed in the FONSI and will need to be resolved prior to construction. These include completion of a Final Design Noise Analysis and permit acquisition for wetland / stream impacts, which will include identification of specific resource boundaries and clearance for threatened and endangered species. There is a potential need for a threatened and / or endangered species survey with possible mitigation requirements which will be identified during the permitting process.

As described in the Environmental Assessment, previous studies identified the Brook Run Quarry site, a Paleo-Indian jasper quarry site dating to 11,500 years ago. While the site was fully investigated and documented by VDOT, there is the potential for discovery of additional unknown archaeological sites during construction. Other possible risks include the possibility that Final Design Noise Analysis and abatement
results could differ from those described in the preliminary noise report and the potential requirement for asbestos abatement of structures scheduled for demolition. Construction could impact the historic Wicked Bottom Spring and precautions will be needed to protect the spring from erosion and sediment runoff. During final design, avoidance and minimization techniques will need to be maintained so that additional coordination efforts with the regulatory agencies will not be required.

**Impacts the Risk Will Have on the Project**

Should additional efforts and coordination be necessary, the greatest impact would be to the project’s budget and schedule. It is important to understand and acknowledge the risks so that appropriate precautions can be taken or incorporated into the budget and schedule to minimize the effect on the project.

The anticipated schedule to manage the environmental risk starts with our team’s water resource specialists conducting a formal stream and wetland delineation, including preparation of Unified Stream Methodology (USM) forms. At the same time, coordination with the regulatory agencies overseeing threatened and endangered species will be initiated to identify the likelihood of a survey being required. Following the submission of the delineation report, the USACE will conduct a Jurisdictional Determination to confirm the delineated areas prior to the Joint Permit Application submission. The permitting process is expected to take 6 to 9 months from NTP pending primarily on the type of permits required.

The cultural resources efforts necessary to complete the MOA commitments can be ongoing during construction and will not delay the start of the project. However, should new undocumented sites be identified, construction may be required to pause within the areas identified while consultation occurs. The final design noise analysis can begin once final design plans are available. This review and documentation can be completed quickly and efficiently, typically within a few weeks, which can easily be incorporated into the overall construction timeline. Any complications due to additional coordination that might be required for any of these risks, as well as the issues previously described, could add delays to the project schedule.

**Mitigation Strategies**

Mitigation starts with avoidance. Much of the potential for impact and risk has already been avoided during the preliminary engineering phase. For those resources that cannot be avoided, they will be minimized. As described above, there is a plan in place to minimize impacts where possible and practical. These minimization efforts will be upheld during final design and construction.

Compensation is the final step of the mitigation process, for impacts beyond the point of avoidance and minimization. Certain compensation options were already agreed upon during the preliminary engineering stage. During the Section 106 consultation, VDOT and the SHPO agreed that the project budget will include $20,800 in contributions to the Virginia Civil War Trails (VCWT) for installation of eight interpretive historic markers. They also agreed to prepare an updated National Register of Historic Places (NRHP) nomination form for the Hansbrough Ridge Historic District to expand the district boundaries.

Compensatory mitigation will be required as a permit condition for stream and wetland impacts that cannot be avoided through design measures. As noted in the FONSI, 4 acres of wetland impacts were estimated and 1,576 linear feet of stream mitigation is expected to be required. As part of the permitting process, USM forms will need to be prepared in order to determine the quality of the waterways impacted, and therefore, the exact amount of compensation required.

The D-B team will ensure that all attempts will be made to continue the avoidance and minimization efforts to reduce any impacts beyond those described and anticipated in the FONSI. Engineering design plans will
be produced that are mindful of the resources and ensure they reflect the least impact practical. As an example, stormwater management ponds will be located in upland areas rather than wetlands and streams. Stream and wetland crossings will be bridged where possible, particularly where there are high-quality streams, large expansive wetland areas, organic soil bottomland wetlands, threatened or endangered species habitat, or otherwise unique and valuable resource areas. Should new or replacement box or pipe culverts be installed, they will be countersunk below streambeds to allow for passage of aquatic species in accordance with the current requirements. In addition, if streams must be relocated, we will incorporate natural channel design principles into the design. We will make sure the design includes the proper erosion and sediment control to protect the Wicked Bottom Spring during construction.

**VDOT’s Role in Mitigating the Risk**

It is anticipated that VDOT will be minimally involved in the resolution of cultural resources, water quality permitting, and noise studies. VDOT involvement in mitigating these environmental risks could include the following:

- VDOT may be called upon to provide documentation of agreements reached during the public hearing and steering committee meetings relating to cultural resource items such as the placement of historical markers or required preservation of the Wicked Bottom Spring
- VDOT may be requested to help facilitate water quality permitting with other state agencies and provide assistance, if necessary, in understanding the commitments included in the NEPA Document
- VDOT will be required to review the final noise study and provide approval of our recommendations for noise abatement requirements

Based on past experience, we anticipate that the GEI team can successfully deliver the project with minimal involvement from VDOT in mitigating the environmental risks.

**RISK #2 – MAINTENANCE OF TRAFFIC RISK**

**Why the Risk is Critical**

The purpose of the Route 3 Widening project is to improve safety along a segment of Route 3 with history of accidents resulting in injuries and death. Introducing highway construction into a corridor with existing safety issues has the potential to increase an already existing risk and place construction workers and the travelling public at an even higher risk. Though the majority of the widening will occur outside of the existing roadway, there will be some areas that have traffic adjacent to construction activities and traffic barriers. There will also be cross over and tie in locations, as well as construction at existing and relocated intersections. These combined factors compound the risk associated with MOT during construction. The risk involves the potential for creating an unsafe work area for both motorists and the construction team within the project limits, disrupting access to Route 3 from side roads and existing private entrances, and maintaining through lanes in areas where paving demolition occurs at the crossovers.

**Impacts the Risk Will Have on the Project**

Local residents and motorist who travel on the Route 3 corridor are sensitive to safety issues that already exist. Creating an unsafe construction work zone could make an already unsafe condition worse. Likewise, if the project design does not account for permanent traffic calming measures as additional means to reduce speed and improve safety through the corridor, a benefit of the widening and improvements would be lost.

**Mitigation Strategies**

The design-build team will develop a Type B, Category IV Transportation Management Plan (TMP) to maintain two lanes of traffic (one lane in each direction) throughout construction. The goal is to provide the most effective combination of temporary traffic controls to maintain safely the two lanes of traffic while
facilitating construction to meet the schedule. During design, the construction manager and design manager will work closely together to develop the TMP, which will meet or exceed the requirements of the MUTCD and the *Virginia Work Area Protection Manual*.

The plan will include temporary traffic control plans (TTCPs), a traffic operations plan, and a public communications plan. Volkert will conduct traffic analyses to evaluate various traffic control strategies for each phase of construction to confirm the inclusion of the most effective traffic control strategies that minimize traffic impacts and maximize safety while facilitating construction to meet the schedule.

The TOP will include the process for notifying the Regional Transportation Operations Center traffic pattern changes, responding to accidents and restoring normal traffic operations, and reviewing and modifying TTCPs to improve safety and efficiency. The public communications plan will include a plan for notifying VDOT officials and public safety and emergency personnel.

During the constructability review, the TMP will be thoroughly evaluated to determine if the proposed TTCs will work efficiently and safely based on the construction phase and site conditions. Compatibility with the sequence-of-construction / phasing plan, compatibility with environmental commitments, compatibility with Regional Operation’s policies, maintaining adequate access to properties and to the work zone, accommodations for emergency vehicles and farm equipment, compliance with state and federal regulations, and of course safety are some of the items that will be addressed during the reviews. Addressing and resolving these traffic maintenance issues during design will result in quick, efficient, and safe implementation at the construction site.

The approved TMP will be reviewed by the construction manager and project superintendent prior to introducing traffic into the work zone to confirm that it is compatible with the actual field conditions and determine if adjustments need to be made. The project superintendent, safety manager, as well as the quality assurance (QA) inspector, independently from the superintendent and safety manager, will monitor traffic through the work zone after the TTC devices are installed to confirm that the plan is working effectively. If adjustments are needed, they will be reviewed by the D-B PM, the construction manager and design manager prior to implementation. Throughout construction, the safety manager, field personnel and the QA inspectors will continually monitor the TTCP set-up to make sure it works safely and efficiently under various conditions, will drive the work zone daily during inclement weather and nighttime operations, and will make adjustments as needed.

It may be prudent to lower the speed limit through the work zone. On a permanent basis, traffic calming devices along the corridor are expected to be provided. The traffic calming measures include dynamic speed display signs, consideration for farm equipment in placement of crossovers, “waiting areas” for known equestrian crossings, and pavement markings to reduce speed. The GEI team shall consider these measures in our design as allowed by VDOT.

**VDOT’s Role in Mitigating the Risk**

VDOT’s role in mitigating the risk is minimal, although approval would be required for a lower work zone speed limit. Also, the fewer restrictions VDOT places on the construction process (e.g., on allowable work hours), the more expeditiously the work will be completed, thus reducing the exposure to construction workers and the traveling public. VDOT will play a role in the review and acceptance of the traffic calming measures that may be suggested in the design.
RISK #3 – UNKNOWN SCHEDULE VARIABLES

Why the Risk is Critical
Unknown schedule variables are a risk on all construction projects. Three of the most common unknown variables are right of way and easement acquisition, utility relocation / improvement, and plan review and approval. Right of way acquisition could impact the schedule due to the significant number of properties involved; including the 3 residential relocations that are currently underway and being handled by VDOT. Dry utility relocation/improvement could impact the schedule because the various private utility companies have not yet started their design and some are reluctant to move forward until plans are nearing approval or land disturbance permits are obtained. Plan review poses a risk to the schedule if outside review agencies or third party representatives do not return comments within a reasonable time thus delaying approval of the final design or work package plans.

Impacts the Risk will have on the Project
Unknown schedule variables are critical because they are directly tied to milestone completion dates and could impact the project duration. The Route 3 Widening project has been anticipated by the citizens of Culpeper County; specifically those in the Stevensburg area. Delays to the project schedule would result in negative press and community reaction.

Mitigation Strategies
Our mitigation strategies to avoid unknown variables associated with right of way acquisition, utility relocation / improvement, and plan review and approval are as follows:

Right of way acquisition begins immediately upon written receipt of the Notice of Intent to Award. We will meet with individual property owners to inform them of project activities and the anticipated schedule. In the event condemnation proceedings are required, the right of way management team will initiate the condemnation proceedings as soon as legally possible; however, the team will continue to negotiate with the property owner in an effort to reach a settlement.

Utility relocation / improvement shall begin immediately upon the Notice of Intent to Award. Utility records will be reviewed to determine exactly which dry utilities are within the limits of the project and a location map will be created noting the exact horizontal and vertical locations of the utilities. The design team will use this information to determine potential conflicts. The utility coordination team will perform advance design for the dry utility companies and submit those drawings to the corresponding utility companies for review and approval. In addition, the D-B team will install conduits and duct banks for the utility companies. This approach will reduce the time required to complete the utility relocations. It is important to note that impacts to existing utilities may require easements; therefore, part of mitigating potential schedule impacts will require the right of way acquisition team and utility management team to work closely together.

Timely review of design work packages will facilitate the early start of construction. The GEI team recognizes that plan review is a collaborative effort. It requires the GEI team to submit a quality set of work packages and plans that will allow VDOT to adhere to the 21-day review period typically provided during design-build projects. The GEI team will monitor the review time of agencies outside of VDOT and will assist with ensuring that all comments are addressed in a timely manner.

VDOT’s Role in Mitigating the Risk
VDOT will need to advise as to when the three residential relocations are complete, provide the necessary state and federal approvals for the utility relocation/ improvements, and assist the D-B design team in obtaining comments and approval from outside review agencies.
Attachment 1 Contents

- Debarment Forms
- Offeror’s VDOT Prequalification Certificate
- Surety Letter
ATTACHMENT NO. 3.2.7(a)

CERTIFICATION REGARDING DEBARMENT

PRIMARY COVERED TRANSACTIONS

Project No.: 0003-023-107, P101, R201, C501

1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

   a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.

   b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; and have not been convicted of any violations of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or receiving stolen property;

   c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1) b) of this certification; and

   d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Signature ___________________________ Date 1/24/13

VICE PRESIDENT

GENERAL EXCAVATION, INC.

Name of Firm
ATTACHMENT NO. 3.2.7(b)  

CERTIFICATION REGARDING DEBARMENT  
LOWER TIER COVERED TRANSACTIONS  

Project No.: 0003-023-107, P101, R201, C501  

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.  

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.  

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.  

[Signature]  
1/22/2013  
Senior Vice President  
Date  
Title  

Volkert, Inc.  
Name of Firm
ATTACHMENT NO. 3.2.7(h)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0003-023-107, P101, R201, C501

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

[Signature] [Date] [Title]

Utility Professional Services, Inc.

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0003-023-107, P101, R201, C501

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

[Signature] [Date: 01/14/13] [First Exec. VP] [Title]

EBA Engineering, Inc.

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0003-023-107, P101, R201, C501

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2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

[Signature] January 7, 2013 [Date]
Principal Engineer [Title]

Engineering and Materials Technologies, Inc.
Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0003-023-107, P101, R201, C501

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

[Signature] 01/11/13 [Principal]
[Signature] Date [Title]

GeoConcepts Engineering, Inc.
Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0003-023-107, P101, R201, C501

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

[Signature] 01/10/2013  Managing Partner
Signature Date Title

Appraisal Review Specialists, LLC
Name of Firm
ATTACHMENT NO. 3.2.7(h)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0003-023-107, P101, R201, C501

(1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.

(2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the firm for contracts to be let by the Commonwealth Transportation Board.

Signed at 2 Ridgeway Ave Greenville, SC., this 10th day of January, 2013.

Signature [Signature]

Title [Title]

Date [1/10/13]

Crider Bouye & Eliot

Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0003-023-107, P101, R201, C501

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Signature ___________________________ Date: January 25, 2013  
Vice President of Finance  
Title

McCormick Taylor, Inc.  
Name of Firm
ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0003-023-107, P101, R201, C501

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

[Signature] 1/15/13 [Vice President]

[Signature] Date [Title]

H&B Surveying and Mapping LLC

Name of Firm
CERTIFICATE OF QUALIFICATION

GENERAL EXCAVATION, INC.

Vendor Number: G181

In accordance with the Regulations of the Virginia Department of Transportation, you are hereby notified that the following Rating and Classifications have been assigned to you by the Commissioner:

PREQUALIFIED

Work Classes: GRADING; MINOR STRUCTURES; INCIDENTAL CONCRETE; UNDERGROUND UTILITIES

Issue Date: 03/22/2012

This Rating and Classification will Expire: 05/31/2013

Suzanne FR Lucas Prequalification Officer

Don E. Sillies, State Contract Officer
January 18, 2013

Mr. Joseph A. Clarke, P.E.
Alternate Project Delivery Office
Virginia Department of Transportation
1401 East Broad Street
Annex Building, 8th Floor
Richmond, Va 23219

RE: General Excavation, Inc.
Project: Route 3 Widening, RFQ: C00014657DB56

Dear Mr. Clarke:

General Excavation, Inc. has been a valued client of the Zurich for over 30 years. During that time, Zurich has supported General Excavation, Inc. for projects in excess of $50 million.

As surety for General Excavation, Inc., Zurich American Insurance Company and/or its subsidiary, Fidelity and Deposit Company of Maryland with A.M. Best Financial Strength Rating of A (Excellent) and with a financial size category of XV ($2 billion +) is capable of obtaining a 100% Performance Bond and 100% Labor and Materials Payment Bond in the amount of the anticipated cost of construction, and said bonds will cover the Project and any warranty periods on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for the reference project subject to our acceptable review of the contract terms and conditions, bond forms, appropriate contract funding and any other underwriting considerations at the time of the request.

Our consideration and issuance of bonds is a matter solely between General Excavation, Inc. and ourselves, and we assume no liability to third parties or to you by the issuance of this letter.

We trust that this information meets with your satisfaction. If there are further questions, please feel free to contact me.

Sincerely,

Zurich American Insurance Company
Fidelity and Deposit Company of Maryland

[Signature]
Nancy L. Adams, Attorney-in-Fact

Notary Public

[Signature]
Deborah S. Isbell

My Commission Expires: October 31, 2016

Notary Registration No.: 7012069
Power of Attorney

FIDELITY AND DEPOSIT COMPANY OF MARYLAND

KNOW ALL MEN BY THESE PRESENTS: That the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, a corporation of the State of Maryland, by FRANK E. MARTIN JR., Vice President, and ERIC D. BARNES, Assistant Secretary, in pursuance of authority granted by Article VI, Section 2, of the By-Laws of said Company, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, does hereby nominate, constitute and appoint Stacey HALL, R. Hutcheson MAUCK, JR., Nancy L. ADAMS and James D. ROBERTS III, all of Richmond, Virginia, EACH its true and lawful agent and Attorney-in-fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: any and all bonds and undertakings and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Company, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the Company at its office in Baltimore, Md., in their own proper persons. This power of attorney revokes that issued on behalf of R. Hutcheson MAUCK, JR., Stacey HALL, dated MAY 12, 2004.

The said Assistant Secretary does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article VI, Section 2, of the By-Laws of said Company, and is now in force.

IN WITNESS WHEREOF, the said Vice-President and Assistant Secretary have hereunto subscribed their names and affixed the Corporate Seal of the said FIDELITY AND DEPOSIT COMPANY OF MARYLAND, this 15th day of November, A.D. 2011.

ATTEST:

FIDELITY AND DEPOSIT COMPANY OF MARYLAND

By:

Eric D. Barnes           Assistant Secretary  Frank E. Martin Jr.  Vice President

State of Maryland  } ss:
City of Baltimore

FOR YOUR PROTECTION,
LOOK FOR THE ZURICH WATERMARK

On this 15th day of November, A.D. 2011, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, came FRANK E. MARTIN JR., Vice President, and ERIC D. BARNES, Assistant Secretary of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and they each acknowledged the execution of the same, and being by me duly sworn, severally and each for himself deposes and saith, that they are the said officers of the Company aforesaid, and that the seal affixed to the preceding instrument is the Corporate Seal of said Company, and that the said Corporate Seal and their signatures as such officers were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

Maria D. Adamski          Notary Public
My Commission Expires: July 8, 2015
EXTRACT FROM BY-LAWS OF FIDELITY AND DEPOSIT COMPANY OF MARYLAND

"Article VI, Section 2. The Chairman of the Board, or the President, or any Executive Vice-President, or any of the Senior Vice-Presidents or Vice-Presidents specially authorized so to do by the Board of Directors or by the Executive Committee, shall have power, by and with the concurrence of the Secretary or any one of the Assistant Secretaries, to appoint Resident Vice-Presidents, Assistant Vice-Presidents and Attorneys-in-Fact as the business of the Company may require, or to authorize any person or persons to execute on behalf of the Company any bonds, undertakings, recognizances, stipulations, policies, contracts, agreements, deeds, and releases and assignments of judgments, decrees, mortgages and instruments in the nature of mortgages, ...and to affix the seal of the Company thereto."

CERTIFICATE

I, the undersigned, Assistant Secretary of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that the Vice-President who executed the said Power of Attorney was one of the additional Vice-Presidents specially authorized by the Board of Directors to appoint any Attorney-in-Fact as provided in Article VI, Section 2, of the By-Laws of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed."

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the said Company,

this 18th day of January, 2013.

[Signature]

Assistant Secretary
Attachment 2 Contents

- SCC and DPOR Information Tables
- SSCC Supporting Registration
- DPOR Licenses
## ATTACHMENT 3.2.10

**State Project No. 0003-023-107, P101, R201, C501**

**SCC and DPOR Information**

Offerors shall complete the table and include the required state registration and licensure information. By completing this table, Offerors certify that their team complies with the requirements set forth in Section 3.2.10 and that all businesses and individuals listed are active and in good standing.

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<tr>
<th>Business Name</th>
<th>SCC Number</th>
<th>SCC Type of Corporation</th>
<th>SCC Status</th>
<th>DPOR Registered Address</th>
<th>DPOR Registered Type</th>
<th>DPOR Registration Number</th>
<th>DPOR Expiration Date</th>
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<td>General Excavation, Inc.</td>
<td>02400679</td>
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<td>Active, In Good Standing</td>
<td>9757 Rider Road Warrenton, VA 20187</td>
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<td>Utility Professional Services, Inc.</td>
<td>05889878</td>
<td>Corporation</td>
<td>Active, In Good Standing</td>
<td>P O Box 923 Colonial Beach, VA 22443</td>
<td>ENG</td>
<td>0407005942</td>
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<td>EBA Engineering, Inc.</td>
<td>F1239005</td>
<td>Foreign Corporation</td>
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<td>ENG</td>
<td>0411000871</td>
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<td>Engineering and Materials Technologies, Inc.</td>
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<td>Corporation</td>
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<td>GeoConcepts Engineering</td>
<td>05167671</td>
<td>Corporation</td>
<td>Active, In Good Standing</td>
<td>19955 Highland Vista Drive, Suite 170 Ashburn, VA 20147</td>
<td>ENG</td>
<td>0407004404</td>
<td>12-31-2013</td>
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<td>Appraisal Review Specialists</td>
<td>T0490682</td>
<td>Foreign LLC</td>
<td>Active, In Good Standing</td>
<td>3058 Mount Vernon Road, Suite 12 Hurricane, WV 25523</td>
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<td>4008001735</td>
<td>04-30-2014</td>
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<tr>
<td>Crider Bouye &amp; Elliott</td>
<td>T0501512</td>
<td>LLC</td>
<td>Active, In Good Standing</td>
<td>2 Ridgeway Avenue Greenville, SC 29607</td>
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<td>McCormick Taylor</td>
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<td>H &amp; B Surveying and Mapping (DBE/Swam)</td>
<td>S2905604</td>
<td>LLC</td>
<td>Active, In Good Standing</td>
<td>612 Hull Street, Suite 101B Richmond, VA 23224</td>
<td>LS</td>
<td>0407005432</td>
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### DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)

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<tr>
<th>Business Name</th>
<th>Individual's Name</th>
<th>Office Location Where Professional Services will be Provided (City/State)</th>
<th>Individual's DPOR Address</th>
<th>DPOR Type</th>
<th>DPOR Registration Number</th>
<th>DPOR Expiration Date</th>
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<tbody>
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<td>William McDowall</td>
<td>Alexandria, VA</td>
<td>2701 Frankie Lane</td>
<td>Professional Engineer</td>
<td>0402018236</td>
<td>10-31-2014</td>
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<td>Hopewell, VA 23860</td>
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<tr>
<td><strong>Volkert, Inc.</strong></td>
<td>Philip Lohr</td>
<td>Alexandria, VA</td>
<td>5400 Shawnee Road, Suite</td>
<td>Professional Engineer</td>
<td>0402046938</td>
<td>12-31-2013</td>
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<td>301 Alexandria, VA 22312</td>
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<tr>
<td>**Appraisal Review</td>
<td>Lorraine Davis</td>
<td>Mechanicsville, VA</td>
<td>647 Beall Avenue</td>
<td>Real Estate Appraiser</td>
<td>4001000349</td>
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<td>Specialists</td>
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<td>Luray, VA 22835</td>
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<tr>
<td><strong>Crider Bouye &amp; Elliott LLC</strong></td>
<td>Charles Crider</td>
<td>Greenville, SC</td>
<td>2 Ridgeway Avenue</td>
<td>Real Estate Appraiser</td>
<td>4001014045</td>
<td>12-31-2014</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Greenville, SC 29607</td>
<td></td>
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</tr>
</tbody>
</table>
CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That GENERAL EXCAVATION, INC. is duly incorporated under the law of the Commonwealth of Virginia;

That the date of its incorporation is March 28, 1983;

That the period of its duration is perpetual; and

That the corporation is in existence and in good standing in the Commonwealth of Virginia as of the date set forth below.

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
December 12, 2012

Joel H. Peck, Clerk of the Commission
STATE CORPORATION COMMISSION

Richmond, December 7, 2009

This is to certify that a certificate of authority to transact business in Virginia was issued and admitted to record in this office for

Volkert, Inc.
(Formerly known as Volkert & Associates, Inc.)
(Formerly known as David Volkert & Associates, Inc.)
(Date of qualification – January 21, 1999)

a corporation organized under the laws of ALABAMA and that the said corporation is authorized to transact business in Virginia, subject to all Virginia laws applicable to the corporation and its business.

State Corporation Commission
Attest:

[Signature]
Clerk of the Commission
Commonwealth of Virginia
State Corporation Commission

I Certify the Following from the Records of the Commission:

Volkert, Inc., a corporation existing under the laws of ALABAMA, holds a certificate of authority to transact business in Virginia, and is in good standing.

The certificate was issued on January 21, 1999.

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
December 7, 2009

Joel H. Peck, Clerk of the Commission
Commonwealth of Virginia

STATE CORPORATION COMMISSION

Richmond, December 31, 2002

This is to certify that the certificate of incorporation of

Utility Professional Services, Inc.

was this day issued and admitted to record in this office and that the said corporation is authorized to transact its business subject to all Virginia laws applicable to the corporation and its business. Effective date: December 31, 2002

State Corporation Commission
Attest:  

[Signature]

Clerk of the Commission

[Seal]
COMMONWEALTH OF VIRGINIA
Department of Minority Business Enterprise
1111 East Main Street, Suite 300
Richmond, Virginia 23219

Robert F. McDonnell
Governor

Lisa M. Hixx-Thomas
Secretary of Administration

Ida Outlaw McPherson
Director

VIRGINIA UNIFIED CERTIFICATION PROGRAM

September 24, 2012

Tanya A. Howe
Utility Professional Services, Inc
311 Cannon Circle
Fredericksburg, VA 22401

Certification Number: DBE 676087

Dear Tanya A. Howe:

The Virginia Department of Minority Business Enterprise (VDMBE) has approved the continued certification of Utility Professional Services, Inc as a Disadvantaged Business Enterprise (DBE) subject to the requirements of the DBE Regulation 49 CFR, Part 26 and all the laws of this state applicable to the transaction of business. Your firm’s Certification Eligibility Period began September 15, 2009. Next year, prior to the anniversary of your certification, you will be required to submit updated information (Affidavit of Continued Eligibility, Updated Contact Information Form, business and personal federal tax returns for the last tax year—signed and dated—and a current Personal Financial Statement of the Owner(s)).

We are pleased to inform you that we have certified your company in the following NAICS Code(s):

- 541330 Engineering Consulting Services, Engineering Services (civil, construction, electrical, design)
- 237210 Land Subdivision, Land Acquisition, Assembling and sub-dividing and utility installation (e.g. electric, gas, telecom, and catv)
- 541340 Drafting Services (dry utility design and relocations for electric, gas, Telecom and CATV)

It is your responsibility to notify VDMBE immediately of any changes in your firm such as name, address, ownership, officers or Board of Directors. Please check the accuracy of your entry in our DBE Directory at www.dmbve.virginia.gov. Your firm’s certification is subject to our review at any time during the year and you may be required to provide any and all relevant documentation. Failure to cooperate by providing the requested information may lead to de-certification.

You may receive management and technical assistance by writing to the Department of Minority Business Enterprise, 1111 East Main Street, Suite 300, Richmond, VA 23219, or by calling (804) 786-6585. If you have questions, please contact Casey Donaldson at (804) 371-0658, or by email at casey.donaldson@dmbve.virginia.gov.

Sincerely,

Calvin M. Thweatt
Certification & Technical Services Manager

(804) 786-6585 • Fax (804) 786-9736 •
www.DMBE.Virginia.gov
Commonwealth of Virginia

STATE CORPORATION COMMISSION

Richmond, January 2, 1996

This is to certify that a certificate of authority to transact business in Virginia was this day issued and admitted to record in this office for

EBA Engineering, Inc.

a corporation organized under the laws of MARYLAND

and that the said corporation is authorized to transact business in Virginia, subject to all Virginia laws applicable to the corporation and its business.

State Corporation Commission

Attest:

William J. Bridge

Clerk of the Commission
CORPORATE DATA INQUIRY

CORP ID: F123900 - 5  STATUS: 00 ACTIVE  STATUS DATE: 12/03/07
CORP NAME: EBA ENGINEERING, INC.

DATE OF CERTIFICATE: 10/22/1997 PERIOD OF DURATION: 
STATE OF INCORPORATION: MD MARYLAND  STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y  MONITOR INDICATOR:
CHARTER FEE: 2000.00  MON NO: 
R/A NAME: CT CORPORATION SYSTEM

STREET: 4701 COX RD STE 301  AR RTN MAIL: 

CITY: GLEN ALLEN  STATE: VA  ZIP: 23060 6802
R/A STATUS: 5 B.E. AUTH IN VI  EFF. DATE: 01/05/04  LOC: 143
ACCEPTED AR#: 211 52 2819  DATE: 09/28/11  HENRICO COUNTY
CURRENT AR#: 211 52 2819  DATE: 09/28/11  STATUS: A  ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
11 1,700.00 1,000,000

(Screen Id:/Corp_Data_Inquiry)
VIRGINIA UNIFIED CERTIFICATION PROGRAM

February 3, 2011

Nanda Sen
EBA Engineering, Inc.
4813 Seton Drive
Baltimore, MD 21215

Dear Nanda Sen:

The Virginia Department of Minority Business Enterprise (VDMBE) has approved the certification of your firm as a Disadvantaged Business Enterprise (DBE) subject to the requirements of the DBE Regulation 49 CFR, Part 26 and all the laws of this state applicable to the transaction of business. EBA Engineering, Inc., is eligible to participate in the DBE Program until November 22, 2013 unless it is determined otherwise. However, prior to November 22 of next year, you will be required to submit updated information (Affidavit of No Change, Updated Contact Information Form, business and personal federal tax returns for the last tax year—signed and dated—and a current Personal Financial Statement of the Owner(s)).

We are pleased to inform you that we have certified your company in the following NAICS Code(s):

237110 Water and Sewer Line and Related Structures Construction
   (Specifically: Construction Management for Site Engineering & Inspection Services for Design and Build Projects)
237310 Highway, Street and Bridge Construction
561210 Facilities Support Services
   (Specifically: Full Civil Design, surveys and GeoTechnical Engineering)

It is your responsibility to notify VDMBE immediately of any changes in your firm such as name, address, ownership, officers or Board of Directors. Please check the accuracy of your entry in our DBE Directory at www.dmbe.virginia.gov. Your firm’s certification is subject to our review at any time during the year and you may be required to provide any and all relevant documentation. Failure to cooperate by providing the requested information may lead to de-certification.

You may receive management and technical assistance by writing to the Department of Minority Business Enterprise, 1111 East Main Street, Suite 300, Richmond, VA 23219, or by calling (804) 786-6585. If you have questions, please contact Sharon Marcus at (804) 225-2489, or by email at Sharon.Marcus@dmbe.virginia.gov.

Sincerely,

Calvin M. Thweatt, VCO
Certification & Technical Services Manager

(804) 786-6585 • Fax (804) 786-9736 • TDD (804) 371-8929 • VA Toll Free (800) 223-0671
www.DMBE.Virginia.gov
CISM0180 CORPORATE DATA INQUIRY

CORP ID: 0478633 - 1 STATUS: 00 ACTIVE STATUS DATE: 01/29/97
CORP NAME: ENGINEERING & MATERIALS TECHNOLOGIES, INC.

DATE OF CERTIFICATE: 01/29/1997 PERIOD OF DURATION: INDUSTRY CODE: 70
STATE OF INCORPORATION: VA VIRGINIA STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:
CHARTER FEE: 50.00 MON NO:
R/A NAME: SHAHZAD S MOOSA MON STATUS: MONITOR DTE:

STREET: 7857 COPPERMINE DR AR RTN MAIL:

CITY: MANASSAS STATE: VA ZIP: 20109
R/A STATUS: 2 OFFICER EFF. DATE: 07/20/06 LOC: 176
ACCEPTED AR#: 213 01 1156 DATE: 11/28/12 PRINCE WILLIAM
CURRENT AR#: 213 01 1156 DATE: 11/28/12 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
13 100.00

(Screen Id:/Corp_Data_Inquiry)
**Please note:** The SCC website will be unavailable Thursday, December 13, from 6 p.m. until 10 p.m. for system maintenance. We apologize for the inconvenience and appreciate your patience.

**NOTICE regarding YEAR-END FILINGS IN THE CLERK’S OFFICE:** SCC offices will be closed on Dec. 26 & 31, 2012, as well as Jan. 1, 2013. To ensure the timely filing of a business entity document, the Notice regarding Year-End Document Submissions, which can be found in the Bulletin Archive in the right-hand navigation pane at scc.virginia.gov/clk

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**CISM0180**  
**CORPORATE DATA INQUIRY**

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<td>DATE OF CERTIFICATE:</td>
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<tr>
<td>R/A NAME:</td>
<td>VIVIAN LEWIS</td>
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<td>STREET:</td>
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<tr>
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<td>19955 HIGHLAND VISTA DR #170</td>
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<tr>
<td>CITY:</td>
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<td>ZIP:</td>
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---

(Screen Id:/Corp_Data_Inquiry)
Commonwealth of Virginia

State Corporation Commission

I Certify the Following from the Records of the Commission:

GeoConcepts Engineering, Inc. (Entity ID#0516767-1) is a stock corporation existing under and by virtue of the laws of Virginia and is in good standing.

The date of incorporation is February 25, 1999.

Nothing more is hereby certified.

Signed and Sealed at Richmond on this Date:
April 25, 2011

Joel H. Peck, Clerk of the Commission
STATE CORPORATION COMMISSION

Richmond, August 10, 2012

This certificate of registration to transact business in Virginia is issued for

Appraisal Review Specialists, LLC
(Date of Registration: February 3, 2012)

a limited liability company organized under the laws of West Virginia and the said company is authorized to transact business in Virginia, subject to all Virginia laws applicable to the company and its business.

State Corporation Commission
Attest:

Clerk of the Commission
<table>
<thead>
<tr>
<th>LLC ID:</th>
<th>T049068</th>
<th>STATUS:</th>
<th>00 ACTIVE</th>
<th>STATUS DATE:</th>
<th>02/03/12</th>
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<td>LLC NAME:</td>
<td>Appraisal Review Specialists, LLC</td>
<td>DATE OF FILING:</td>
<td>02/03/2012</td>
<td>PERIOD OF DURATION:</td>
<td>99/99/9999</td>
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<tr>
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<td></td>
<td>CONVERSION/DOMESTICATION INDICATOR:</td>
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<tr>
<td>STREET:</td>
<td>3058 MOUNT VERNON RD</td>
<td>PRINCIPAL OFFICE ADDRESS:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CITY:</td>
<td>HURRICANE</td>
<td>STATE:</td>
<td>WV</td>
<td>ZIP:</td>
<td>25526-0000</td>
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<tr>
<td>R/A NAME:</td>
<td>INCORP SERVICES INC</td>
<td>R/A STATUS:</td>
<td>5</td>
<td>ENTITY AUTHORIZ EFF DATE:</td>
<td>02/03/12</td>
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<tr>
<td>STREET:</td>
<td>7288 HANOVER GREEN DR</td>
<td>LOC:</td>
<td>142 HANOVER COUNTY</td>
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<tr>
<td>CITY:</td>
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<td>ZIP:</td>
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</tbody>
</table>

YEAR FEES PENALTY INTEREST BALANCE
13 50.00

(Screen Id:/LLC_Data_Inquiry)
STATE CORPORATION COMMISSION

Richmond, May 22, 2012

This certificate of registration to transact business in Virginia is this day issued for

Crider, Bouye & Elliott, LLC

a limited liability company organized under the laws of SOUTH CAROLINA and the said company is authorized to transact business in Virginia, subject to all Virginia laws applicable to the company and its business.

State Corporation Commission
Attest:

[Signature]
Clerk of the Commission
This is to certify that a certificate of authority to transact business in Virginia was this day issued and admitted to record in this office for

McCormick, Taylor & Associates, Inc.

a corporation organized under the laws of PENNSYLVANIA

and that the said corporation is authorized to transact business in Virginia, subject to all Virginia laws applicable to the corporation and its business.

State Corporation Commission

Attest:

William J. Bridge
CIS90100

CORPORATE DATA INQUIRY

07/12/10
10:04:21

CORP ID: F129691 - 4
CORP NAME: MCCORMICK TAYLOR, INC.

DATE OF CERTIFICATE: 06/03/1997 PERIOD OF DURATION: 
STATE OF INCORPORATION: PA PENNSYLVANIA STOCK INDICATOR: S STOCK
MERGER IND: CONVERSION/DOMESTICATION IND:
GOOD STANDING IND: Y MONITOR INDICATOR:

CHARTER FEE: 150.00 MON NO: MONITOR DUE:
R/A NAME: RICHARD A BUTALA

STREET: NORTH SHORE COMMONS A
CITY: GLEN ALLEN STATE: VA ZIP: 23060

R/A STATUS: 2 OFFICER EFF. DATE: 03/05/04 LOC: 143

ACCEPTED AR#: 210 19 1917 DATE: 05/10/10 HENRICO COUNTY
CURRENT AR#: 210 19 1917 DATE: 05/10/10 STATUS: A ASSESSMENT INDICATOR: 0
YEAR FEES PENALTY INTEREST TAXES BALANCE TOTAL SHARES
10 450.00 70,000
STATE CORPORATION COMMISSION

Richmond, April 27, 2009

This is to certify that the certificate of organization of

H & B Surveying and Mapping, LLC

was this day issued and admitted to record in this office and that the said limited liability company is authorized to transact its business subject to all Virginia laws applicable to the company and its business. Effective date: April 27, 2009

State Corporation Commission
Attest:

Joel Heck
Clerk of the Commission
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

EXPIRES ON
04-30-2013

NUMBER
2701 026132A

BOARD FOR CONTRACTORS
CLASS A CONTRACTORS LICENSE

GENERAL EXCAVATION INC
9757 RIDER ROAD
WARRENTON VA 20187

*CLASSIFICATIONS* H/H SDS

ALTERATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR USE BY PERSONS OR FIRMS OTHER THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)

COMMONWEALTH OF VIRGINIA
BOARD FOR CONTRACTORS - CLASS A CONTRACTOR LICENSE - CLASSIFICATIONS: H/H SDS

NUMBER: 2701 026132A EXPIRES: 04-30-2013
GENERAL EXCAVATION INC
9757 RIDER ROAD
WARRENTON VA 20187

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-6500

Gordon N. Dixon, Director
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION

PROFESSIONS: ENG, LA

VOLKERT INC
5400 SHAWNEE RD
STE 301
ALEXANDRIA, VA 22312
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA
6900 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 387-8500

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION

PROFESSIONS: ENG

UTILITY PROFESSIONAL SERVICES INC
UTILITY PROS
P O BOX 923
COLONIAL BEACH, VA 22443

[Signature]

(ATTENTION OF THE RECipient: USE OF THIS REGISTRATION, OR USE BY PERSONS WHO HAVE BEEN
AUTHORIZED TO USE THIS REGISTRATION, IS PROHIBITED UNDER THE CODE OF VIRGINIA.)

(ATTENTION OF THE RECipient: USE OF THIS REGISTRATION, OR USE BY PERSONS WHO HAVE BEEN
AUTHORIZED TO USE THIS REGISTRATION, IS PROHIBITED UNDER THE CODE OF VIRGINIA.)
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY BRANCH OFFICE REGISTRATION

PROFESSIONS: ENG

EBA ENGINEERING INC
714 WESTWOOD OFFICE PARK
FREDERICKSBURG, VA 22401

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION

PROFESSIONS: ENG

ENGINEERING & MATERIALS TECHNOLOGIES, INC
7857 COPPERMINE DR
MANASSAS, VA 20109

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
EXPIRES ON
12-31-2013

NUMBER
0407004404

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS
BUSINESS ENTITY REGISTRATION

PROFESSIONS: ENG

GEOCONCEPTS ENGINEERING INC
19955 HIGHLAND VISTA DRIVE
SUITE 170
ASHBURN, VA 20147

ALTERATION OF THIS DOCUMENT, USE AFTER EXPIRATION, OR USE BY PERSONS OR FIRMS OTHER THAN THOSE NAMED MAY RESULT IN CRIMINAL PROSECUTION UNDER THE CODE OF VIRGINIA.

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

Expires on 10-31-2014

Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers
and Landscape Architects
Professional Engineer License

William Douglas McDowell II
2701 Frankie Ln
Hopewell, VA 23860-7777

Alteration of this document, use after expiration, or use by persons or firms other than those named may result in criminal prosecution under the Code of Virginia.

(See reverse side for name and/or address change)
BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS AND LANDSCAPE ARCHITECTS

PROFESSIONAL ENGINEER LICENSE

PHILIP M LOHR
VOLKERT & ASSOCIATES, INC.
5400 SHAWNEE RD
STE 301
ALEXANDRIA, VA 22312
DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

NUMBER
4001 000349

REAL ESTATE APPRAISER BOARD
CERTIFIED GENERAL REAL ESTATE APPRAISER

LORRAINE A DAVIS
647 BEALL AVENUE
LURAY VA 22835

(SEE REVERSE SIDE FOR NAME AND/OR ADDRESS CHANGE)

Gordon N. Dix, Director
Attachment 3.3.1 Contents

- Key Personnel Resume Forms
### ATTACHMENT 3.3.1

#### KEY PERSONNEL RESUME FORM

**Brief Resume of Key Personnel anticipated for the Project.**

| a. Name & Title: | Scott C. Hunter, Vice President |
| b. Project Assignment: | Design-Build Project Manager |
| c. Name of Firm with which you are now associated: | General Excavation, Inc. |
| d. Years experience: | With this Firm 5 Years With Other Firms 21 Years |

*Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) year.:*

**Name of Firm:** General Excavation, Inc.  
**Start Date:** 2007  **End Date:** Present  
**Position:** Vice President  
As Vice President of General Excavation, Inc. Mr. Hunter has been Responsible-in-Charge for contract administration and project management.  
- South King Street Widening, Phase I in Leesburg, Virginia ($4.5 million for Town of Leesburg) – Responsible-in-Charge for contract administration and project management. February 2012 – Present.  
- Route 234 Park & Ride Project in Prince William County, Virginia ($5.3 million for VDOT) – Responsible-in-Charge for contract administration and project management. March 2012 – Present.  
- Route 7 Traffic Flow Improvements Project in Loudoun County, Virginia ($3.7 million for Loudoun County) – Responsible-in-Charge for contract administration and project management. April 2012 – Present.  
- Aldie Route 50 Traffic Calming Project in Loudoun County, Virginia ($3.7 million for VDOT) - Responsible-in-Charge for contract administration and project management. Project was completed $500,000.00 below contract award amount. September 2011 – December 2012.  
- Pacific Boulevard Widening Design-Build Project in Loudoun County, Virginia ($1.9 million for VDOT) - Design-Build Project Manager responsible for complete oversight and delivery of project design, construction, quality management and contract administration. May 2010 – August 2012.  
- Leesburg Park and Ride in Loudoun County, Virginia ($4.3 million for Loudoun County) - Responsible-in-Charge for contract administration and project management. November 2008 – June 2010.  
- Route 340 Bridge Replacement Project over Jeremy’s Run in Page County, Virginia ($7.7 million for VDOT) - Responsible-in-Charge for contract administration and project management. January 2008 – August 2009.  
- Route 208 Bypass Project Phase 1, Spotsylvania County, Virginia ($13.4 million for VDOT) - Responsible-in-Charge for contract administration and project management. January 2007 – December 2008.  

**Name of Firm:** Lane Construction  
**Start Date:** 2006  **End Date:** 2007  
**Position:** Project Manager - During his five months as a Project Manager for Lane Construction, Mr. Hunter assisted the estimating and management staffs in the development of the 495 HOT Lanes Design-Build proposal.  

**Name of Firm:** Moore Brothers Company, Inc.  
**Start Date:** 2003  **End Date:** 2006  
**Position:** Vice President of Construction - Responsible-in-Charge for project construction  

**Name of Firm:** Moore Brothers Company, Inc.  
**Start Date:** 1997  **End Date:** 2002  
**Position:** General Superintendent - Responsible-in-Charge for project construction  

e. **Education:** Name & Location of Institution(s)/Degree(s)/Year/Specialization:  
Virginia Military Institute – Lexington, Virginia /B.S./1986/Civil Engineering  
f. **Active Registration:** Year First Registered/Discipline/VA Registration #: N/A  
g. **Document the extent and depth of your experience and qualifications relevant to the Project.**
Pacific Boulevard Widening – VDOT Design-Build Project – Loudoun County, Virginia
1. Specific Responsibilities and Authorities for the Assignment:
Design-Build Project Manager – Responsible-in-Charge for the overall design, right-of-way acquisition, construction, quality control, quality assurance, and contract administration for Pacific Boulevard Widening project in Loudoun County. Project value was $1,850,103 and consisted of constructing 2,100 LF of two lanes of secondary roadway; reconstructing and widening of 850 LF of two lanes of secondary roadway; building a new traffic signal at the intersection of Pacific Boulevard and Sterling Boulevard; providing power to the new signal; and relocating sanitary sewer facilities.
Firm: General Excavation, Inc.
Dates: May 20, 2010 – August 2012

Route 340 over Jeremy’s Run – VDOT – Page County, Virginia
1. Specific Responsibilities and Authorities for the Assignment:
Vice President - Principal-in-Charge of contract administration and project management. Assisted the estimating department in the development and preparation of the bid submission. During construction assisted the project management staff with preparation of subcontracts, scheduling, issuance of purchase orders, budgets, and cost controls. The value of this award winning project was $7,674,952 and consisted of construction a bridge over Jeremy’s Run. This project was recognized for its Excellence in Construction as the Best Project in the Staunton District in 2009.
Firm: General Excavation, Inc.
Dates: January 25, 2008 – August 2009

Route 208 Courthouse Road, Spotsylvania Courthouse - Phase 1- Spotsylvania County, Virginia – VDOT
1. Specific Responsibilities and Authorities for the Assignment:
Vice President - Principal-in-Charge of contract administration and project management. Assisted with the development of a revised sequence of construction and maintenance of traffic plan to better facilitate the safe flow of traffic, school buses, and emergency service vehicles through the limits of the project during construction. Supervised the project management staff with the development of the schedule, scoping, procurement, coordination of public notices, environmental compliance, and cost controls measures. The value was $13,463,486 and included construction of a new 4-lane divided roadway, traffic signals, stormwater management basins, environmental mitigation and other incidental construction activities on primary and secondary roadways.
Firm: General Excavation, Inc.
Dates: January 2007 – December 2008

I-66 HOV Lane Widening – Route 234 Bypass to Route 234 Business – VDOT Manassas, Virginia
1. Specific Responsibilities and Authorities for the Assignment:
Vice President – Construction/General Superintendent – Principal-in-Charge of construction management and administration for all field operations. The value of this project was $38 million and consisted of constructing 6.11 kilometers of HOV lanes (in each direction) in the median of I-66; 6.11 kilometers in each direction of pavement widening on the outside of I-66; bridge deck construction and widening I-66 EBL over Route 234 business; 5 box culverts – extensions to the outside of I-66; 260,000 cubic meters of excavation; 250,000 metric tons of bituminous asphalt paving; and more than 37,000 meters of temporary traffic barrier service.
Firm: Moore Brothers Company, Inc.
Dates: August 2004 – December 2006

I-95/Route 627 Interchange – VDOT – Stafford County, Virginia
1. Specific Responsibilities and Authorities for the Assignment:
Vice President – Construction/General Superintendent – Principal-in-Charge Supervised on-site construction management staff and was the principle point of contact for the administration of the contract after award. Assisted the field staff with the assignment and allocation of resources, project management, quality control, and development of the construction schedule. The value of this project was approximately $46 million and included the construction of a new interchange on I-95; two bridges over I-95, one bridge over Route 1, and one over a stream; the reconstruction of approximately 5,000 LF of Route 1; 1.3 million cubic meters of excavation; 4,800 meters of storm drain; 167,000 metric tons of bituminous asphalt; 2,800 meters of water main; a new traffic signals; and permanent traffic signs. Of significant note is the savings of over $4 million realized as a result of numerous VEPs that were approved throughout the duration of construction.
Firm: Moore Brothers Company, Inc.
Dates: May 2002 – March 2006
<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel Anticipated for the Project</th>
</tr>
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<tbody>
<tr>
<td>a. Name &amp; Title</td>
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<tr>
<td>Bill McDowall, Vice President of Construction Management Services</td>
</tr>
<tr>
<td>b. Project Assignment</td>
</tr>
<tr>
<td>Quality Assurance Manager</td>
</tr>
<tr>
<td>c. Name of firm with which you are now associated:</td>
</tr>
<tr>
<td>Volkert, Inc.</td>
</tr>
<tr>
<td>d. Years experience:</td>
</tr>
<tr>
<td>With this Firm 11 Years With Other Firms 21 Years</td>
</tr>
<tr>
<td>Please list chronologically your employment history, position and general experience or fields of practice for the last 15 years:</td>
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<tr>
<td>Name of Firm: Volkert, Inc.</td>
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<tr>
<td>Start Date: Sept. 2002</td>
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<tr>
<td>End Date: Present</td>
</tr>
<tr>
<td>Position: Vice-President, Construction Management</td>
</tr>
<tr>
<td>Provides contract management, schedule development and review, quality assurance management, quality control oversight and field inspection coordination/management</td>
</tr>
<tr>
<td>Name of Firm: Virginia Department of Transportation</td>
</tr>
<tr>
<td>Start Date: 1996</td>
</tr>
<tr>
<td>End Date: 2001</td>
</tr>
<tr>
<td>Position: Assistant State Construction Engineer</td>
</tr>
<tr>
<td>Oversight of construction program in 3 VDOT districts</td>
</tr>
<tr>
<td>e. Education: Degree(s)/Year/Specialization:</td>
</tr>
<tr>
<td>B.S., 1980, Civil Engineering specializing in Construction Management</td>
</tr>
<tr>
<td>f. Active Registration: Year First Registered/ Discipline/VA Registration #:</td>
</tr>
<tr>
<td>1988, Professional Engineer, Virginia # 0402 018236</td>
</tr>
<tr>
<td>g. Document the extent and depth of experience and qualifications relevant to the Project.</td>
</tr>
<tr>
<td>1. Note your specific responsibilities and authorities for each assignment, not those of the firm.</td>
</tr>
<tr>
<td>2. Note whether experience is with current firm or with other firm.</td>
</tr>
<tr>
<td>3. Provide beginning and end dates for each assignment.</td>
</tr>
<tr>
<td>(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)</td>
</tr>
<tr>
<td>I-66 Pavement Rehabilitation Design-Build Project, Fairfax County, Virginia, VDOT</td>
</tr>
<tr>
<td>1. Specific Responsibilities and Authorities for the Assignment:</td>
</tr>
<tr>
<td>Quality Assurance Manager. Managed quality assurance for the design and construction of a $43-million design-build project involving full-depth patching of concrete pavement and asphalt overlay of a 6.5-mile segment of I-66. Project included roadway improvements, drainage and utility upgrades, a transportation management plan, ITS and lighting improvements, and public outreach. Managed preparation and implementation of QA/QC plan and monitored compliance throughout design and construction. Developed, monitored, and updated CPM construction schedule. Conducted a constructability review during each of the 4 stages of design. Coordination of concurrent design and construction through the development of an effective but complex sequencing plan and complex transportation management plan to maintain high volumes of traffic on I-66. Managed QA inspection and materials testing of concrete, asphalt, and soil including preparation of the QA testing plan, review and approval of the QC testing plan, supervision of QA testing technicians, review of testing results, preparation of deficiency and nonconformance reports, and confirmation of accurate maintenance of testing documentation including the materials notebook, etc. Led preparatory and intermediate inspection meetings and prepared construction inspection checklists. Coordinated with VDOT’s OIA/OVST Inspectors. Worked with the contractor and QC team to anticipate and resolve field issues before schedule and budget was affected and to resolve nonconforming materials and construction work in the most efficient and cost-effective manner. Reviewed and approved non-conformance recovery plans, and monitored corrective actions and retests. Prepared monthly summary reports.</td>
</tr>
<tr>
<td>2. Firm: Volkert, Inc.</td>
</tr>
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</table>
Route 221 Realignment, Roanoke County, Virginia
1. Specific Responsibilities and Authorities for the Assignment:
QA/QC Manager. QA/QC for the realignment a 0.75-mile segment of Route 221. This ARRA-funded $20-million construction project involved roadway realignment and widening from 2 to 4 lanes, 2 new prestressed-concrete bulb-t beam bridges, a single-span steel replacement bridge, a new culvert, intersection improvements, a new drainage system and 2 SWM ponds. Observed the inspectors’ work and checked project documentation for completeness and accuracy and to verify proper organization and maintenance. Reviewed testing reports for completeness and accuracy. Reviewed the blasting and surplus removal plans to confirm the judicious use of explosives, proper blasting techniques, and safety. Evaluated and reviewed construction schedules for completeness and conducted schedule impact analysis. Planned upcoming work activities with the construction manager and inspection staff. Assisted with the identification of potential issues and careful planning for avoiding/mitigating them. Met with the VDOT project manager to evaluate satisfaction with inspector performance and to discuss quality improvement processes. The existing 2-lane road is a major commuter route with an average daily traffic volume of 14,000 and runs through rocky hills as high as 190 feet. Extensive blasting next to the roadway was required for the excavation of 373,858 CY of earth material with 60% rock. It included clays, silts, and rock of numerous types of geological formations ranging from the very hard charokite to the soft sandstone. Challenges included blasting operations that are appropriate for the various types of rocks and geological conditions, prevention of slope failure, safety of motorists and construction workers, avoiding environmental impacts, omission from the steel schedule, and finding a disposal site that complied with local ordinances and VDOT and the USACE requirements.
2. Firm: Volkert, Inc.

Route 11/460 Widening, Salem, Virginia
1. Specific Responsibilities and Authorities for the Assignment:
QA/QC Manager. Conducts QA review, constructability review, NOI analysis, CPM schedule review including schedule impact analysis, and engineering support to address construction issues for a $22-million construction project, which includes widening of a 2.1-mile section of 3-lane road to 4 lanes, including a 44-foot long bridge over Little Bear Rock Branch on drilled shafts, a triple-box culvert, a double-box culvert, a raised median, center and right-turn lanes at intersections and crossovers, and an extensive storm drainage system with stormwater management ponds and large jack and bore segments under the Norfolk Southern Railroad tracks into the Roanoke River. The project included blasting and associated safety measures for 25,000CY of grading. Conducts site visits to observe the inspectors’ work and checks project documentation and testing reports for completeness, accuracy, and proper organization. Discusses upcoming work activities with inspection staff to verify proper equipment on hand and understanding of testing frequency. Meets with VDOT and contractor representatives to discuss and evaluate construction issues and advise on potential cost effective solutions to potential and existing issues.
2. Firm: Volkert, Inc.

Middle Ground Boulevard Design-Build Project, Newport News, Virginia, VDOT
1. Specific Responsibilities and Authorities for the Assignment:
Chief Construction Manager. Reviewed piling for baring, length, and center of gravity. Made recommendation for various adjustments, reviewed asphalt placement and verified QC on placement and reviewed CPM schedule for completeness. The $32-million design-build project includes a new 4-lane roadway connecting Jefferson Avenue to Warwick Boulevard, a bridge over the CSX Railroad, a sidewalk, a shared-use path, enhanced landscaping and street lights, an additional turn lane and signal modifications.
2. Firm: Volkert, Inc.

Replacement of Route 61 over the New River Design-Build Project, Narrows, VDOT
1. Specific Responsibilities and Authorities for the Assignment:
Construction Manager. Oversight of quality assurance services during the design and $22 million construction of a new, 2-lane, prestressed-concrete beam, bulb-t bridge(1.131 feet in length) to replace a structurally deficient bridge. The project also includes the construction of 5,970 lf of MSE wall and 174 lf of other retaining wall, roadway approaches, storm drainage system, bike lanes, sidewalks, and utilities. Reviewed the QA/QC plan, meets weekly with the QA manager and inspector, monitors budget and schedule, evaluates and confirms compliance of QA services with the VDOT Minimum Requirements for QA/QC on Design-Build and PPTA Projects and Volkert’s quality standards, reviews documentation to confirm accuracy and completeness, verifies VDOT’s and contractor’s satisfaction.
2. Firm: Volkert, Inc.
**ATTACHMENT 3.3.1.**  
**KEY PERSONNEL RESUME FORM**

<table>
<thead>
<tr>
<th>Brief Resume of Key Personnel Anticipated for the Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Name &amp; Title</td>
</tr>
<tr>
<td>Phil Lohr, PE Project Manager</td>
</tr>
<tr>
<td>b. Project Assignment</td>
</tr>
<tr>
<td>Design Manager</td>
</tr>
<tr>
<td>c. Name of firm with which you are now associated:</td>
</tr>
<tr>
<td>Volkert, Inc.</td>
</tr>
<tr>
<td>d. Years experience:</td>
</tr>
<tr>
<td>With this Firm <strong>14</strong> Years With Other Firms <strong>13</strong> Years</td>
</tr>
<tr>
<td><em>Please list chronologically your employment history, position and general experience or fields of practice for the last 15 years:</em></td>
</tr>
<tr>
<td>Name of Firm: Volkert, Inc.</td>
</tr>
<tr>
<td>Start Date: 1999</td>
</tr>
<tr>
<td>End Date: Present</td>
</tr>
<tr>
<td>Position: Senior Civil Engineer and Project Manager</td>
</tr>
<tr>
<td>Manages civil and roadway engineering design, leads engineering design development, manages coordination of project disciplines including roadway, H&amp;H, drainage, stormwater management, E&amp;S, environmental, structures, traffic (control device design, MOT/TMP, traffic analyses). Provides client management, agency review coordination, schedule and budget management, and quality control/quality assurance development/review. Coordinates all subconsultant work.</td>
</tr>
<tr>
<td>Name of Firm: Lim &amp; Associates</td>
</tr>
<tr>
<td>Start Date: 1997</td>
</tr>
<tr>
<td>End Date: 1998</td>
</tr>
<tr>
<td>Position: Civil Engineer</td>
</tr>
<tr>
<td>Designed sewer plans and assisted in field surveying, field inspections/review.</td>
</tr>
<tr>
<td>e. Education: Degree(s)/Year/Specialization:</td>
</tr>
<tr>
<td>B.C.E., 1993, Civil Engineering</td>
</tr>
<tr>
<td>B.A., 1993, Natural Science</td>
</tr>
<tr>
<td>M.S., 1995, Civil Engineering</td>
</tr>
<tr>
<td>M.A., 1998, Linguistics</td>
</tr>
<tr>
<td>f. Active Registration: Year First Registered/ Discipline/VA Registration #:</td>
</tr>
<tr>
<td>1988, Professional Engineer, Virginia # 0402 018236</td>
</tr>
<tr>
<td>g. Document the extent and depth of experience and qualifications relevant to the Project.</td>
</tr>
<tr>
<td>1. <em>Note your specific responsibilities and authorities for each assignment, not those of the firm.</em></td>
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<tr>
<td>2. <em>Note whether experience is with current firm or with other firm.</em></td>
</tr>
<tr>
<td>3. <em>Provide beginning and end dates for each assignment.</em></td>
</tr>
<tr>
<td>(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)</td>
</tr>
<tr>
<td><strong>Route 3 Widening, Culpeper County, Virginia, VDOT</strong></td>
</tr>
<tr>
<td>1. <em>Specific Responsibilities and Authorities for the Assignment:</em></td>
</tr>
<tr>
<td><em>Project Manager:</em> Managed the development of Public Hearing plans to widen a 5-mile, 2-lane segment of roadway to a 4-lane, divided roadway. The context-sensitive design minimized impacts to historic properties including the Civil War-era Brandy Station Battlefield and an archaeological site and minimized disturbance to wetland areas. Project involved the study and preliminary design of 2 alternatives. One alternative widened the road from 2 to 4 lanes on current alignment through the Town of Stevensburg. The other alternative included a 2-mile bypass around the town. Services involved a review of the initial design alternatives; a preliminary hydrologic and hydraulic analysis; a preliminary stormwater management / hydraulic plan, a transportation management plan, and preliminary roadway plans for both alternatives, Public Hearing plans for the selected alternative, and assistance with the public hearing. The selected plan, widening the road on current alignment through the Town of Stevensburg, incorporated left-turn lanes at all crossroads and median crossovers, right-turn lanes at all crossroads and most median crossovers, a raised median</td>
</tr>
</tbody>
</table>
through the urbanized section to separate traffic, the design of the curve at Route 739 (Clay Hill Road) for 60 mph, and the 64-foot depressed grass median in the more rural section at the east end of the project. These improvements were designed to address the safety concerns which necessitated the project. The left-turn lanes at all crossroads and median crossovers are crucial safety designs for high-speed rural roadways like Route 3. Additionally, the curve at Route 739 (Clay Hill Road) is designed for 60 mph for increased safety.

2. Firm: Volkert, Inc.

Martin Luther King Freeway Extension PPTA Project, Portsmouth, Virginia, VDOT, Elizabeth River Crossing LLC
1. Specific Responsibilities and Authorities for the Assignment:
Civil Project Manager. Responsible for daily coordination and technical supervision of civil design work for the design of a $207-million, 1-mile, 4-lane, limited-access freeway (urban principal arterial), including a new urban trumpet interchange at I-264 and a new half-diamond interchange I-264 the widening of a 0.8 mile segment of I-264 to add auxiliary lanes, side road improvements, 650 feet of retaining walls, 1,750 feet of sound walls, drainage system upgrades, and new stormwater management facilities. Uses a context-sensitive approach compatible with community standards that minimizes impacts to historic resources such as a cemetery complex, Calvary Baptist Church, and the Prentiss Park neighborhood and maintains the connectivity of the neighborhoods with pedestrian friendly amenities and aesthetically pleasing treatments of bridges and stormwater management. Optimized use of the project footprint for the location of stormwater management ponds to minimize need for additional right-of-way. Responsible for roadway design, hydrologic and hydraulics analyses, erosion concerns, and traffic management. Responsible for fast-track design that has seen the project progress from 30% roadway plans to FRC (100%) within approximately 20 months.
2. Firm: Volkert, Inc.

Partial Grade Separated Interchange on Route 58, VDOT
1. Specific Responsibilities and Authorities for the Assignment:
Project Engineer. Daily technical supervision of design services for a $28.3 million new grade separated interchange on Route 58 in Southampton County. Developed a concept for the design which reduces wetland and right-of-way impacts, eliminates left turns, provides safer access, and calms traffic. Services involve complete design of the roadway, 2 roundabouts, 2 new prestressed concrete bulb-t bridges, retaining walls, drainage, stormwater management, erosion and sediment controls, traffic signals, signs, pavement markings, lighting, landscaping, and water and sanitary sewer adjustments; the development of an IJR, wetland permit sketches, traffic data collection and analysis, preparation of a TMP, plat preparation for right-of-way acquisition, supplemental survey, and geotechnical engineering.
2. Firm: Volkert, Inc.
3. Dates: April 2012-June 2014

Route 29 / Route 666 Interchange Study and Interchange Justification Report, Culpeper County, VDOT
1. Specific Responsibilities and Authorities for the Assignment:
Project Manager. Managed a study of interchange concepts, preparation of an IJR, and design through the Public Hearing stage of a new $30.5-million interchange. Project involved update of an interchange study of 4 interchange concepts including a diamond, single point urban, partial cloverleaf, and roundabout interchanges; development of an IJR, which involved traffic analysis and modeling using Synchro and Sidra and methodologies in the Highway Safety Manual to predict a quantitative measure of expected average crash frequency along the corridor for the conditions in future years 2020 and 2040 for the 4 alternatives; a signal warrant analysis; and evaluation and application of access management controls. Public Hearing Plans were developed for the selected concept including roadway widening and relocation, pedestrian and bike accommodations, hydraulic, signal, and sign design and a TMP.
2. Firm: Volkert, Inc.

Old Bon Air Road Curve Realignment, Chesterfield County, VDOT
1. Specific Responsibilities and Authorities for the Assignment:
Project Manager. Designed preliminary field inspection plans for the realignment of Old Bon Air Road to eliminate a dangerous curve and improve sight distance and safety. The plans included curb and gutter on one side of the road and a paved shoulder to accommodate bicycles on the other, a new box culvert to convey Powhite Creek under Old Bon Air Road, drainage systems upgrades, stormwater management plans, erosion and sediment control plans, and TMPs for each phase of construction. The design process involved the creation and evaluations of 4 alternatives for selection by the County and an H&H analysis to determine if the stormwater drainage system can accommodate the additional runoff generated by the improvements.
2. Firm: Volkert, Inc
**Brief Resume of Key Personnel anticipated for the Project.**

<table>
<thead>
<tr>
<th>a. Name &amp; Title:</th>
<th>Page L. Gallihugh, Jr. – General Superintendent</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Project Assignment:</td>
<td>Construction Manager</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated:</td>
<td>General Excavation, Inc.</td>
</tr>
<tr>
<td>d. Years experience:</td>
<td>With this Firm 10 Years With Other Firms 13 Years</td>
</tr>
</tbody>
</table>

*Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years:*

**Name of Firm:** General Excavation, Inc.  
**Start Date:** 2001  
**End Date:** Present  
**Position: General Superintendent**

As General Superintendent for General Excavation, Inc. Mr. Gallihugh has managed the following projects:

- Route 7 Traffic Flow Improvements Project in Loudoun County, Virginia ($3.7 million for Loudoun County) – General Superintendent responsible for field construction operations. April 2012 – Present.
- Pacific Boulevard Widening Design-Build Project in Loudoun County, Virginia ($1.9 million for VDOT) – General Superintendent responsible for field construction operations. May 2010 – August 2012.
- Sycolin Road Widening, Phase II in Leesburg, Virginia ($2.7 million for Town of Leesburg) - General Superintendent responsible for field construction operations. June 2010 – September 2011.
- Route 610 Improvements Project in Stafford County, Virginia ($5.1 million for VDOT) - General Superintendent responsible for field construction operations. November 2006 – August 2008.
- Route 15 Improvements in Loudoun County, Virginia ($4.7 million for VDOT) - General Superintendent responsible for field construction operations. November 2006 – November 2007.
- Route 649 Project in Albemarle County, Virginia ($4.8 million for VDOT) - General Superintendent responsible for field construction operations. March 2004 – September 2005.
- Route 15 Improvements in Loudoun County, Virginia ($4.4 million for VDOT) - General Superintendent responsible for field construction operations. May 2002 – May 2003.

**Name of Firm:** Virginia Department of Transportation  
**Start Date:** 1998  
**End Date:** 2001  
**Position: Construction Quality Improvement Inspector**

- Inspection of VDOT projects for safety issues, quality construction, and adherence to specification and plans.

**e. Education:** Name & Location of Institution(s)/Degree(s)/Year/Specialization:  
Orange County High School – Orange, Virginia/1988

**f. Active Registration:** Year First Registered/Discipline/VA Registration #:  


**g. Document the extent and depth of your experience and qualifications relevant to the Project.**

1. *Note your specific responsibilities and authorities for each assignment, not those of the firm.*
2. *Note whether experience is with current firm or with other firm.*
3. Provide beginning and end dates for each assignment.
(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)

Pacific Boulevard Widening – VDOT Design-Build Project – Loudoun County, Virginia
1. Specific Responsibilities and Authorities for the Assignment:
General Superintendent – Management and oversight of the field operations for the VDOT Pacific Boulevard design-build project. The contract price $1.9 million consisted of designing and constructing 0.56 miles of secondary roadway. Significant borrow material was necessary to complete the project. Duties included negotiations with property owners of borrow sites essential to secure the required material; coordination with utility companies and the service authority for removal, replacement and relocation of existing utilities; monitor quality control inspections and testing to make sure the required frequency is being met and the results are acceptable.
Firm: General Excavation, Inc.
Dates: May 2010 – August 2012

Route 610 Garrisonville Road, Stafford County, Virginia
1. Specific Responsibilities and Authorities for the Assignment:
General Superintendent of this $5.1 million VDOT bid-build project that consisted of 0.87 miles of grading, drainage, asphalt pavement, water, sanitary sewer, signage and traffic signals. The project included complex traffic control issues with three (3) major intersections and a daily traffic count of 50,000 VPD. The project required daily communication with the school system, VDOT and service authorities. Responsible for the safety of GEI employees and the traveling public. Coordinated with the local government agencies, commercial entities and media outlets to provide notice of upcoming lane shifts and detours. Served as the point of contact with the Stafford County Utilities Department for the upgrade to their facilities during the widening of Garrisonville Road.
Firm: General Excavation, Inc.
Dates: November 2006 – August 2008

Route 208 Courthouse Road, Spotsylvania Courthouse - Phase 1 - Spotsylvania County, VA – VDOT
1. Specific Responsibilities and Authorities for the Assignment:
General Superintendent – Management of a $13.4 million VDOT bid-build project consisting of 4.82 km of grading, drainage, excavation, asphalt pavement, curb & gutter, guardrail, landscaping, traffic signalization, electrical items, pavement markings, misc. concrete, pipe and structure installation and erosion & sediment control. Mr. Gallihugh was responsible for scheduling all crews and equipment. He negotiated with property owners to secure borrow and disposal sites. Participated in planning and progress meetings that included VDOT management staff, Spotsylvania County elected officials, and field supervisors. His knowledge of VDOT specifications and standards and his ability to communicate complex ideas and details to the stakeholders helped to develop positive community relations.
Firm: General Excavation, Inc.
Dates: January 2007 – December 2008

I-66 University Boulevard – VDOT – Prince William County, Virginia
1. Specific Responsibilities and Authorities for the Assignment:
General Superintendent – Managed $11.1 million VDOT bid-build project consisting of 0.922-mile project constructing of a bridge across I-66 and the Norfolk Southern Railroad. Managed the maintenance of traffic plan, which included I-66 traffic and Norfolk Southern rail traffic. Involved close coordination with the Norfolk Southern Railroad flagmen to ensure that construction activities within the railroad right-of-way did not interfere with the train schedules. During the erection of the steel bridge spans a complete closure of I-66 was necessary and was permitted in 15-minute intervals, which involved coordination with the State Police to provide the necessary lane closures. The project was completed ahead of schedule.
Firm: General Excavation, Inc.

Route 234 Dumfries Road at Lake Jackson Drive – VDOT – Prince William County, Virginia
1. Specific Responsibilities and Authorities for the Assignment:
General Superintendent – Managed a $16.2 million VDOT bid-build project consisting of 2.071 Miles of grading, construction of 3 bridges, drainage, asphalt drainage, storm water management, signs and signals. Managed and coordinated subcontractors involved with the installation of bridges, asphalt pavement, curb & gutter, guardrail and fence. He was responsible for managing GEI pipe crews and grading crews assigned to the project. Scheduling and coordinating material deliveries and their staging was an interregnal part of his daily activities. Traffic controls including detours, lane shifts and maintenance of traffic through the work zone was included in his duties.
Firm: General Excavation, Inc.
Dates: April 2001 – October 2002
### KEY PERSONNEL RESUME FORM

**Brief Resume of Key Personnel anticipated for the Project.**

<table>
<thead>
<tr>
<th>a. Name &amp; Title:</th>
<th>Frederic N. Howe, III - Principal</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Project Assignment:</td>
<td>Utility Coordination Manager</td>
</tr>
<tr>
<td>c. Name of Firm with which you are now associated:</td>
<td>Utility Professional Services, Inc.</td>
</tr>
<tr>
<td>d. Years experience:</td>
<td>With this Firm 10 Years With Other Firms 22 Years</td>
</tr>
</tbody>
</table>

*Please list chronologically (most recent experience first) your employment history, position and general experience or fields of practice for the last fifteen (15) years:*

**Name of Firm: Utility Professional Services, Inc.**

- **Start Date:** 2002
- **End Date:** Present
- **Position:** Principal (Founding Partner)

  Mr. Howe is the principal of UtilityPros. He manages a staff of experienced utility consultants and provides Utility Coordination and Engineering services for the four dry utilities (cable, electric, communication and gas). He has managed the utility consulting services for Utility Professional Services, Inc. since 2002. Mr. Howe's experience includes providing design and construction for the dry utilities to public and private sector clients. Mr Howe has been instrumental in pursuing methods to expedite the work of private utility companies within transportation corridor. The methods include providing advanced designs and construction of the duct banks and conduit through contractors pre-approved by the dry utility companies to perform such services.

**Name of Firm: Virginia/Dominion Power**

- **Start Date:** 1997
- **End Date:** 2002
- **Position:** Business Development Director

  Mr. Howe worked for Dominion Power for 22 years in various positions from 1979 to 2002. From 1997 to 2002 he served as the Business Development Director in the Fairfax, Virginia office. During his tenure at Dominion Power Mr. Howe was responsible for designing electrical power distribution systems, preparation of detailed cost estimates for electric services, providing customer contracts and orders, preparation of district budgets, providing electric sales and services to industrial, commercial, and residential customers, and served as the Project Manager for expansion of services.

**e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:**

- The Citadel – Charleston, SC/BS/1979/ Business Administration

**f. Active Registration: Year First Registered/Discipline/VA Registration #:**

- Not Applicable

**g. Document the extent and depth of your experience and qualifications relevant to the Project.**

1. Note your specific responsibilities and authorities for each assignment, not those of the firm.
2. Note whether experience is with current firm or with other firm.
3. Provide beginning and end dates for each assignment.

*(List at least three (3), but no more than five (5) relevant projects for which you have performed a similar function.)*

**Route 3 Widening Improvements Design/Build project – Spotsylvania, VA**

1. **Specific Responsibilities and Authorities for the Assignment:**

   Principal-in-Charge managing the dry utility relocations for the widening of Route 3 in Spotsylvania County. Coordinated and facilitated the relocation of aerial lines owned by Verizon and Dominion Power and underground gas lines owned by Columbia Gas. In addition, Mr. Howe managed subcontractors in the construction of utility duct banks and conduit to expedite the installation of the relocated lines, provided subsurface utility locating services prior to construction beginning.

   **Firm:** Utility Professional Services, Inc.

   **Dates:** January 2011 – January 2013
**Columbia Pike - Arlington, VA**

1. Specific Responsibilities and Authorities for the Assignment:

   Principal-in-Charge managing the dry utility conversion for the Columbia Pike project with Arlington County. Identify, plan, and design the overhead to underground conversion of all aerial facilities along Columbia Pike from S. Jefferson Street to S. Columbia Street utilizing as much existing infrastructure to save cost, structure, locations, and quantities as required to complete the conversions. Managed the coordination effort with the dry utility companies on the design and approval of the plans from the actual conversion through the removal of aerial facilities.

   *Firm:* Utility Professional Services, Inc.

   *Dates:* June 2012 – Ongoing

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**Catholic University of America - Washington, DC**

1. Specific Responsibilities and Authorities for the Assignment:

   Principal-in-Charge managing the dry utility conversions for the Catholic University of America in Washington, DC along Michigan Avenue and Monroe Street through design, plan approval and construction. Identified, planned and designed the overhead to underground conversion of aerial facilities within the project.

   *Firm:* Utility Professional Services, Inc.

   *Dates:* June 2011 – Ongoing

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**Pierce Queen - Arlington County, VA**

1. Specific Responsibilities and Authorities for the Assignment:

   Principal-in-Charge managing the dry utility design for Pierce Queen Apartments in Arlington County. Coordinated the identification of utilities, plan, and design for the relocation/ conversion of aerial facilities to underground with the most cost effective results. Coordinated with the dry utilities through conversion and removal of facilities.

   *Firm:* Utility Professional Services, Inc.

   *Dates:* June 2011 - Ongoing
### Brief Resume of Key Personnel Anticipated for the Project

<table>
<thead>
<tr>
<th>a. Name &amp; Title</th>
<th>Debra Moore, Right of Way Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Project Assignment</td>
<td>Right of Way Manager</td>
</tr>
<tr>
<td>c. Name of firm with which you are now associated:</td>
<td>Volkert, Inc.</td>
</tr>
<tr>
<td>d. Years experience:</td>
<td>2 Years With Other Firms 20 Years</td>
</tr>
</tbody>
</table>

*Please list chronologically your employment history, position and general experience or fields of practice for the last 15 years:*

<table>
<thead>
<tr>
<th>Name of Firm: Volkert, Inc.</th>
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</thead>
<tbody>
<tr>
<td>Start Date: June 2010</td>
</tr>
<tr>
<td>End Date: Present</td>
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<tr>
<td>Position: Right of Way Manager</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of Firm: VDOT, Right of Way Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Date: 2000</td>
</tr>
<tr>
<td>End Date: 2010</td>
</tr>
<tr>
<td>Position: Right of Way Assistant Manager</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of Firm: VDOT, Right of Way Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Date: 1997</td>
</tr>
<tr>
<td>End Date: 2000</td>
</tr>
<tr>
<td>Position: Land Acquisition Agent, Senior</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of Firm: VDOT, Right of Way Section</th>
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</thead>
<tbody>
<tr>
<td>Start Date: 1995</td>
</tr>
<tr>
<td>End Date: 1997</td>
</tr>
<tr>
<td>Position: Land Acquisition Specialist</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>e. Education: Degree(s)/Year/Specialization:</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.S., 1973, Elementary Education</td>
</tr>
<tr>
<td>M.S., 2005, Transportation Policy, Operations, and Logistics</td>
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</tbody>
</table>

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<thead>
<tr>
<th>f. Active Registration: Year First Registered/ Discipline/VA Registration #:</th>
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**Dulles Corridor Metrorail Project, Fairfax County, Virginia, VDOT**

1. **Specific Responsibilities and Authorities for the Assignment:**

   *Right of Way Manager.* Providing ROW management and consulting services on the program management team for the design and construction of the silver line extension of the Metrorail to Dulles International Airport. Responsible for oversight of all real estate matters pertaining to the project, including land acquisition, proffers, dedications, and coordination of real property interests among project stakeholders. Working with MWAA, the Dulles Transit Partners, and the project management team to streamline, troubleshoot, and resolve on-going right-of-way issues and concerns.
including impacts to major developers with demands for Metro station details. Responsibilities include scheduling of acquisition completion with construction requirements, settlement approvals, plan review, staff hiring, trial preparation, document development including a RAMP for the project, and audit responses. Provides project details to fee counsel for development of WMATA maintenance and conveyance documents. Also provided oversight on relocation assistance matters for commercial relocations, and handled the relocation of all tenants in a 200 unit mini storage facility. Coordinates with VDOT assigned fee counsel and experts retained for condemnation services. In addition to land acquisition duties, assisted in Transit Oriented Development (TOD), managed all surplus properties, provided scheduling assistance, conducted plan reviews, and assisted with public involvement efforts. The project involves several stakeholders including, MWAA, VDOT, Fairfax County, and Washington Metropolitan Area Transit Authority.

2. Firm: Volkert, Inc.
3. Dates: 2010-Present

Virginia Department of Transportation, Right of Way Section

1. Specific Responsibilities and Authorities for the Assignment:

Right of Way Assistant Manager. Managed all aspects of the negotiation and legal functions of the Right of Way section. Responsible for direction of all negotiations with individual landowners by staff and consultants. Supervised staff performing title reports for all properties involved in highway projects. Supervised staff performance of the settlement process for all properties. Ensured conformance with appropriate laws and regulations. Used best judgment in approving all settlement values for all acquisitions in NOVA District. Acted as Acting Right of Way Manager in manager’s absence. Responsible for executing the hiring policies and completing the hiring of all staff within the section. Developed plans for workload assignments and project schedules.

2. Firm: VDOT
3. Dates: 2000-2010

Virginia Department of Transportation, Right of Way Section

1. Specific Responsibilities and Authorities for the Assignment:

Land Acquisition Agent, Senior. Managed, directed, and monitored production of consultant negotiators for right of way acquisition in compliance with all applicable state and federal statutes and department policies. Negotiated rights of way for complex projects in accordance with state and federal laws and department policies. Managed and directed all aspects of relocation of cemeteries, conducted job interviews for negotiation personnel, provided professional and administrative direction to negotiation specialists, agents and technicians, and communicated orally and in writing with property owners, appraisers, attorneys, county personnel, and various VDOT section employees. Served as expert witness in condemnation proceedings. Coordinated of parkland mitigation acquisitions, represented the VDOT Right of Way section at public meetings, served as Right of Way representative for Prince William County coordination meetings, assisted with training course in plan reading for right of way personnel, and attended pre-advertisement and pre-construction meetings.

2. Firm: VDOT

Virginia Department of Transportation, Right of Way Section

Dates: 1994-1995

Transportation Right of Way Agent. Negotiated with landowners for acquisition of rights of way, computed cost estimates for future highway projects; attended pre-advertisement and pre-construction meetings, and performed current owners rundown and 20 year title searches.

Virginia Department of Transportation, Right of Way Section

Dates: 1995-1997

Land Acquisition Specialist. Conducted negotiations with property owners for right of way acquisition, prepared legal documents and right of way reports for each acquisition in accordance with all applicable state and federal statutes and VDOT policies, and managed and directed consultant negotiators for compliance with state and federal regulations and department policies and procedures. Attended public hearings and field inspections, relocated cemeteries, served as expert witness in county courts for condemnation cases, and performed title searches.
The Pacific Boulevard Widening project also required a designed detour and traffic management plan. The existing Pacific Boulevard roadway was closed for a limited period of time in order to facilitate construction of the widening required. This closure necessitated that a detour be implemented in order to maintain access to businesses on the north end of the project. Since a portion of the work required the complete reconstruction of Relocation Drive, the traffic management plan included provisions to demolish and reconstruct Relocation Drive under traffic using daily lane closures and flaggers. The project was completed without any reportable incidents or accidents.

While straightforward, the project presented the GEI design-build team with several challenges. The first of these challenges was the acquisition of the right-of-way and easements required to construct the project. Since the project impacted nine (9) different properties and eleven (11) different owners, surveys were required to accurately develop and depict the plans and plans necessary for the appraisals and offers. The title research found that the smallest parcel impacted identified four (4) different property owners of a commercial condominium, which was divided into a northern segment and southern segment with the majority of the owners being located in Colorado. Preparing and presenting an offer to a property with multiple owners, who are represented by an association required a significant amount of time and effort to resolve.

The second challenge involved preparing the design and acquiring the right-of-way and easements required to provide permanent power to the new traffic signal. Determining the most cost effective and efficient alignment required the involvement and approval of VDOT, the power company, and a private land development company (Prologis). The GEI design-build team developed and executed an agreement with Prologis that enabled the permanent power for the traffic signal to be installed within a permitted landscape easement owned by Prologis. The negotiations required to secure the necessary easement were done at no additional cost to the Department and were completed by GEI independently of the right-of-way negotiations associated with the roadway widening. Additionally, the GEI design-build team agreed to implement and incorporate improvements to the approved sanitary sewer plan without additional cost to the Department. The improvement eliminated a manhole structure, upgraded a sanitary lateral, and was negotiated by GEI directly with Prologis and approved by the Loudoun County Water Authority.

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The second challenge involved preparing the design and acquiring the right-of-way and easements required to provide permanent power to the new traffic signal. Determining the most cost effective and efficient alignment required the involvement and approval of VDOT, the power company, and a private land development company (Prologis). The GEI design-build team developed and executed an agreement with Prologis that enabled the permanent power for the traffic signal to be installed within a permitted landscape easement owned by Prologis. The negotiations required to secure the necessary easement were done at no additional cost to the Department and were completed by GEI independently of the right-of-way negotiations associated with the roadway widening. Additionally, the GEI design-build team agreed to implement and incorporate improvements to the approved sanitary sewer plan without additional cost to the Department. The improvement eliminated a manhole structure, upgraded a sanitary lateral, and was negotiated by GEI directly with Prologis and approved by the Loudoun County Water Authority.

The last noteworthy challenge related to the condition of the existing soils and material encountered. Since the existing material was determined to be unsuitable, several options were presented when considering how best to treat the material, including the use of geotextile fabrics and soil stabilization treatments. To minimize impacts to the schedule, the material was undercut, removed from the project, and replaced with suitable material from several off-site borrow sources.

The Pacific Boulevard Widening project also required a designed detour and traffic management plan. The existing Pacific Boulevard roadway was closed for a limited period of time in order to facilitate construction of the widening required. This closure necessitated that a detour be implemented in order to maintain access to businesses on the north end of the project. Since a portion of the work required the complete reconstruction of Relocation Drive, the traffic management plan included provisions to demolish and reconstruct Relocation Drive under traffic using daily lane closures and flaggers. The project was completed without any reportable incidents or accidents.
or to

Construction elements included a new divided four-lane roadway, traffic signals, guardrail installation, drainage, and environmental mitigation and traffic control on both the primary and secondary road systems.

Full legal name of the affiliate or subsidiary and the role they will have on the project.

County, Virginia

Courthouse Bypass

Name:

VDOT – Fredericksburg Design Section

Name of Client / Owner: Virginia Department of Transportation Phone: (540) 899-4288 Fredericksburg District Project Manager: Mr. C. Dennis Williams Phone: (540) 899-4133 Email: charles.williams@vdot.virginia.gov

12/2008

12/2008

$13,463

$14,400

($7% Increase to the Final Contract Value was a result of Approved Change Orders, Quantity Overruns, and Asphalt and Fuel Adjustments

$9,168

End

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly.

Scopes of Work Similar to Route 3

- Project length is approximately three miles
- Close communication with a diverse group of stakeholders / Third Parties
- Intersection reconstruction within a busy corridor
- Permanent changes to known / existing traffic patterns for residents
- Multiple Stormwater Management Facilities along the road corridor
- Multiple Storm Drainage Culvert Crossing
- Termination of Existing 'Thru' Streets with Proposed Cul-de-Sacs
- Construction of and within a limited access roadway
- Numerous properties impacted during construction

Lessons Learned

- Engage Third Parties and stakeholders early in the process
- Insure that all environmental commitments are kept
- Maintain an active Public Relations campaign to keep the public informed
- Notify Third Parties and the public of upcoming changes to traffic patterns
- Verification of horizontal/vertical survey information prior to construction
- Identification of buried utility lines prior to construction and determination if located lines are active
- Aggressively pursue the identification of borrow sources and waste areas prior to construction

GEI was the Prime Contractor for this 3.00 mile section of Route 208 in Spotsylvania County, Virginia. This project consisted primarily of the construction of a new four-lane divided roadway and included embankment excavation, clearing, miscellaneous concrete items, pipe and structure installation, utility relocations, asphalt pavement, curb & gutter, guardrail, SWM, landscaping, traffic signalization, and pavement markings.

The project was constructed in two phases each with numerous stages. Phase I consisted of the construction of the new EBL and WBL of Route 208 between existing 208 and Route 613. The Route 613 upgrade improvements were also completed in Phase 1 of the construction sequence. Phase II consisted of the completion of the remainder of mainline Route 208 and final surface paving and pavement markings. The project was carefully scheduled and staged specifically to avoid traffic disruptions during peak volume periods and in the area of the courthouse. In order to accomplish these critical objectives, we communicated closely with numerous third parties including the National Park Service, County government, the Spotsylvania School Board, utility owners, businesses and residents and kept them all well informed of progress on the project and any upcoming construction activities, traffic shifts, road closures, and/or new traffic patterns that would impact the traffic flow.

There were two significant aspects of the project that required special attention throughout the course of design and construction. The first was ensuring that all of the commitments made to the National Park Service were adhered to throughout the life of the project. This included verifying survey data noting the limits of construction relative to the location of the National Battlefield. Special attention was given to material haul routes within the limits of the project to be sure construction activities did not encroach on the historic battlefield. Commitments were made to the Park Service that the viewshed to the battlefield would be preserved and special accommodations were provided to avoid scenic pull off areas with signs noting specific details of the Civil War battles that occurred in Spotsylvania County. The second distinguishing feature of this project was the construction of an off-site wetland mitigation location. The wetland mitigation site was noted as a necessary element of work required to comply with the environmental documents. The site was approximately 2 acres in size and fulfilled environmental requirements not only for this project, but also for later phases of Route 208 construction.

Since the new four-lane divided highway was primarily constructed on an alignment that intersected and cut off several secondary roadways, a detailed traffic management plan was required to facilitate the safe construction of the project and to enable and ensure that all motorists, school buses, and first responders were provided with sufficient information noting in advance the exact dates and times of significant changes to the traffic patterns. GEI met personally with many of the local residents to inform them of upcoming changes and public meetings were held to inform schools, the courthouse, and emergency services. Maintaining an open line of communication with third parties and stakeholders is a critical key to ensuring the timely delivery of a project. Engaging these key partners early in the design process and keeping them informed of progress insures that their opinions are considered and that they will assist with keeping others informed of changes to traffic patterns as milestones dates are met.

GEI’s ability to manage and schedule the operations of this project enabled us to deliver this vital project to VDOT and the people of Spotsylvania County on time and within budget. The safety of the construction staff and public was maintained throughout the entire project with no recordable lost time accidents or incidents reported.

Construction elements included a new divided four-lane roadway, traffic signals, guardrail installation, drainage facilities, storm water detention facilities and other features. Work items included earthwork, fine grading, underground construction, asphalt concrete, environmental mitigation and traffic control on both the primary and secondary road systems.
The University Boulevard project also required the removal of over 27,000 cubic yards of unsuitable material, and importing over 230,000 cubic yards of suitable borrow material.

Traffic and the project completed on time. Coordination with local utility companies was required to ensure that the appropriate power and communication services were available to both of these traffic signals when requested enabling the roadway to be opened to traffic.

The project also included the construction of a box culvert and MSE retaining walls. Two new traffic signals were constructed where the alignment of University Boulevard intersected Route 29 and Wellington Road.

Scope of Work Similar to Route 3
- Construction work within a limited access road
- Retaining wall construction
- Pedestrian trail adjacent to limited access road
- Detailed Traffic Management Plan required
- Coordination of construction activities with impacted Third Parties
- Public Relations outreach campaign to inform third parties of design plan, changes to traffic patterns and movements (pedestrian and vehicles)
- Informing Third Parties of design plan, changes to traffic patterns and movements
- Construction of 2 new traffic signals
- Storm Drainage
- Maintenance of Traffic
- Scheduling
- Bituminous Asphalt Paving
- Construction Management of Subcontractors

Lessons Learned / Keys to Success
- Develop a MOT/TMP Plan that reduces the impact to the traveling public and surrounding businesses while enabling safe construction practices
- Locate and secure disposal sites and borrow areas as soon as possible
- Engage local utility companies early in the design process to ensure the timely delivery of power to traffic signals
- One of the significant features of this project was the construction of a 477’ bridge structure over both I-66 and the railroad right-of-way which is owned and operated by Norfolk Southern. The as-bid maintenance of traffic plan included a schedule that permitted traffic on I-66 to be stopped in 15 minutes increments during off-peak hours at night to erect and set the structural steel. After carefully reviewing traffic flows, an alternate plan was implemented that detoured traffic off of I-66 around the work zone. The utilization of this detour created a safer work environment, facilitated a longer work period, and significantly reduced the disruption to traffic and local residents and businesses.

The project also included the construction of a box culvert and MSE retaining walls. Two new traffic signals were constructed where the alignment of University Boulevard intersected Route 29 and Wellington Road. Coordination with local utility companies was required to ensure that the appropriate power and communication services were available to both of these traffic signals when requested enabling the roadway to be opened to traffic and the project completed on time.

The University Boulevard project also required the removal of over 27,000 cubic yards of unsuitable material, and importing over 230,000 cubic yards of suitable borrow material.

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**ATTACHMENT 3.4.1(a)**

**LEAD CONTRACTOR - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Name of the prime design consulting firm responsible for the overall project design.</th>
<th>c. Contact information of the Client or Owner and their Project Manager who can verify Firm’s responsibilities.</th>
<th>d. Contract Completion Date (Original)</th>
<th>e. Contract Completion Date (Actual or Estimated)</th>
<th>f. Contract Value (in thousands)</th>
<th>g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Boulevard</td>
<td>Dewberry &amp; Davis, LLC</td>
<td>Name of Client/Owner: Virginia Department of Transportation Phone: (703) 815-3239 – NOVA District Office Project Manager: Mr. William Green (Retired) Phone: (571) 329-5418 (cell – current) E-mail: <a href="mailto:wgreen@volkert.com">wgreen@volkert.com</a> (current)</td>
<td>09/2006</td>
<td>09/2006</td>
<td>$11,157</td>
<td>$12,134 (8.8% Increase to the Final Contract Value due to Approved Change Orders – one of significant value that added a retaining structure, and Asphalt and Fuel Adjustments)</td>
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<td>Prince William County, Virginia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$5,968</td>
</tr>
</tbody>
</table>

| Note: The full legal name of the affiliate or subsidiary and the role they will have on the Work Performed by the Firm identified as the Lead Contractor for this procurement, so the relevancy of that work can be considered accordingly. |
The Route 3 corridor through Culpeper County has been the location of numerous accidents resulting in a high number of injuries and deaths over the past 6 years. To improve safety, VDOT’s goal was to widen the entire Route 3 corridor through Culpeper County to a 4-lane, divided highway including the incorporation of numerous safety improvements. Improvements to the eastern and western segments of Route 3 are complete. The purpose of this project was to design the widening and other safety improvements to the remaining 4.9-mile segment in the Stevensburg area.

As the prime designer, Volkert, Inc. developed Public Hearing plans for the widening of a 4.9-mile segment of Route 3 from 4.1 miles east of Route 29 to 4.0 miles west of the Culpeper County line. Services included an alternative study; a hydrologic and hydraulic (H&H) analysis; survey; design of roadway improvements, drainage, stormwater management, traffic control devices, and temporary traffic control plans; quantity calculations; cost estimate; coordination of plans with VDOT’s Environmental Division and Right of Way Division; and assistance with the Public Hearing and public outreach to stakeholders.

The project involved the study and preliminary design of 2 alternatives. One alternative widened the road from 2 lanes to 4 lanes centerline alignment through the Town of Stevensburg. The other alternative included a 2-mile bypass around the north side of the town.

The alternative concept on current alignment was selected for further development. In addition to roadway widening, the design incorporated the following improvements:
- Left-turn lanes are provided at all cross roads and median crossovers. This is especially important on a high-speed rural roadway such as Route 3.
- Right-turn lanes are provided at all cross roads and most median crossovers.
- The urbanized typical section through Stevensburg incorporates a raised median to separate opposing traffic.
- The curve at Route 739 (Clay Hill Road), an area with well-known safety issues, is designed for 60 mph and incorporates the aforementioned safety features.
- In the more rural section toward the east end of the project, a 64-foot depressed grass median is provided.

The context-sensitive design minimized impacts to a historic building (Salubria), the Civil War era Brandy Station battlefield and Hansbrough Ridge encampment, the historic Wicked Bottom spring and an archaeological site just east of Brook Run. An urban typical section was utilized extending beyond the limits of Stevensburg and landscaping features were proposed in order to blend the project seamlessly into its natural and historic environment.

Volkert’s scope included a preliminary hydrologic and hydraulic analysis. Working hand-in-hand with VDOT, the stormwater management plan was refined to consolidate the stormwater management ponds, resulting in the number of ponds being reduced by half. In addition, the ponds were located in order to minimize disturbance to wetland areas as delineated at that time.

To meet VDOT’s initial schedule, Volkert prepared Public Hearing plans within an accelerated time frame of 2 months from Notice to Proceed. Volkert assisted VDOT with the preparation and facilitation of the Public Hearing held in March 2011. Subsequent to the Public Hearing, and in response to input received by VDOT during their Route 3 Task Force meetings, Volkert designed a multi-lane roundabout at the intersection of Route 663 to calm traffic, improve safety, and accommodate large trucks and farm equipment. Additional exhibits were prepared for VDOT’s use at the Task Force meetings, including an exhibit showing dynamic speed-detection signs to calm traffic through Stevensburg, landscaping recommendations, median crossovers at key locations and equine refuge areas.

The work was performed in Volkert’s office in Alexandria, Virginia.

Lessons Learned:
- Historic and cultural resources, such as the Civil War battlefield areas, are important to the community. Impacts must be minimized.
- Maintaining access for business and property owners and farmers and constructing the project in a timely manner under safe conditions are important to the success of the project. These concerns must be addressed as the sequence of construction and TMP are developed.
- Natural resources such as, the Wicked Bottom Spring, must be protected during construction.

“Volkert had our three biggest projects in the District. Volkert always had someone available. Volkert was very responsive. They provided displays for a public meeting with only a days notice.”

“Volkert was good in meeting schedules. We were able to meet with only a days notice.”

John Giometti
Former Culpeper District L&D Engineer
**LEAD DESIGNER - WORK HISTORY FORM**

**(LIMIT 1 PAGE PER PROJECT)**

<table>
<thead>
<tr>
<th>a. Project Name &amp; Location</th>
<th>b. Name of the prime/ general contractor responsible for overall construction of the project.</th>
<th>c. Contact information of the Client and their Project Manager who can verify Firm’s responsibilities.</th>
<th>d. Construction Contract Completion Date (Original)</th>
<th>e. Construction Contract Completion Date (Actual or Estimated)</th>
<th>f. Contract Value (in thousands)</th>
<th>g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: Martin Luther King Extension PPTA Portsmouth, VA (Part of the Elizabeth River Tunnels PPTA Project)</td>
<td>Skanska USA Civil Southeast Kiewit Construction Company Weeks Marine:</td>
<td>Name of Client: Parsons Brinkerhoff Phone: (757) 466-9660 Project Manager: Fred Parkinson, PE Phone: (757) 466-9660 Email: <a href="mailto:Parkinson@pbworld.com">Parkinson@pbworld.com</a></td>
<td>03/2016</td>
<td>03/2016 (estimated)</td>
<td>207,000</td>
<td>207,000</td>
</tr>
</tbody>
</table>

**Lessons Learned**

- Use a context-sensitive approach compatible with community standards, minimize impacts to historic resources & maintain connectivity of neighborhoods
- Address poor soil conditions to minimize impacts to the schedule early in the design process
- Optimize use of the project footprint for the location of stormwater management ponds to minimize the need for additional right-of-way
- Closely coordinate design to assure integration of systems (e.g. bridges, retaining walls, drainage, utilities, lighting, MOT, etc.) to eliminate conflicts
- Conduct early coordination with CSX RR to minimize impacts to the rail yard and avoid drainage issues

1-264 and U.S. Route 58 serve as part of the regional highway network and are important commercial and commuter routes in the Tidewater area of Virginia. In the City of Portsmouth, a direct connection between Martin Luther King (Rt. 58/Rt. I-64) and I-264 did not exist, forcing drivers, including a high percentage of truck and commercial traffic from the ports, to use local neighborhood streets. As part of the $2-billion Elizabeth River Tunnels PPTA, the Martin Luther King (MLK) Extension project extends U.S. Route 58 south from London Boulevard approximately 1.0 mile to I-264 with a new interchange at High Street.

Volkert is the lead designer for the $207-million MLK Extension. Volkert’s work includes bridge, roadway/civil, and traffic engineering, as well as landscape design, bridge architectural treatments and incorporation of plans developed by others. With the design of MLK Extension spanning one year, from April 2012 to May 2013, Volkert has worked closely with the contractors and provided plans and submittals on schedule. The plans and submittals are broken into multiple works packages – 7 structural and 5 civil – with both overlapping and staggered deadlines, driven by the contractors’ schedule and right of way acquisitions. The MLK Extension is a 4-lane, elevated, limited-access freeway (urban principal arterial), with a new trumpet interchange at I-264 and a new half-diamond interchange at High Street, modifications to the London Boulevard interchange, 2 bridge widenings, the widening of I-264 to add auxiliary lanes, side road improvements, new stormwater management facilities and numerous retaining walls. Interchange modifications include improvements to a substandard loop ramp, changes to horizontal curvature, grade adjustments on ramps to connect to the MLK Extension, and drainage modifications to fit the revised grading and new roadways. Features of the design follow.

- With an extremely fast-track design, the project progressed from 30% roadway plans to RFC (100%) drawings within a span of approximately 10 months.
- The design includes an extensive Type C Traffic Management Plan.
- The context-sensitive design minimizes impacts to historic resources (including a cemetery complex, Calvary Baptist Church, and the Prentiss Park neighborhood), maintains connectivity of neighborhoods with pedestrian friendly amenities, incorporates aesthetic treatments on and under the bridges, and turns stormwater management ponds into attractive water features.
- The design maximizes the available space for stormwater management facilities to minimize impacts on an aging and over-taxed storm drain system.
- Safety is greatly enhanced by the MLK Extension, as a large volume of traffic (including trucks) will be removed from city streets and routed onto the new controlled-access facility. This benefits both vehicular and pedestrian traffic and minimizes conflict points, and multiple modes of traffic are successfully accommodated.
- Right-of-way plans have been optimized to minimize impacts to the approximately 70 parcels involved, a number of which involve relocations.
- Utility coordination, including power and communications/ITS, has been a significant aspect of this project.
- The mainline concept includes 26 steel and pre-stressed concrete spans and the ramp concept includes 15 ramp spans and 2 bridge widenings over railroad tracks and a local road. Pier locations and span lengths avoided conflicts with existing and proposed railroad tracks.
- Coordinated the design of span arrangements with the CSX Railroad to accommodate expansion plans for the rail yard.

The work is performed in Volkert’s office in Alexandria, Virginia with bridge design support from Volkert’s Tampa, Florida office.
**Lessons Learned**

- Establish clear communications for decision making for design and construction
- Multiple work packages allow construction to continue if one element fails to reach approval
- Include realistic plan review times in the schedule
- When working near or on an interstate, have a plan in place to mitigate potential impacts caused by accidents and traffic backups on the interstate
- Anticipate potential scope changes before approval.
- Evaluate options to accelerate construction and work with the contractor to identify constructability issues

The I-66 project is a $43M rehabilitation of 6.5 miles of badly deteriorated pavement between the Capital Beltway and Route 50 in Fairfax County. To minimize impacts to motorists, the majority of lane closures and construction took place at night. Volkert served as lead designer for this design-build contract, providing, design, maintenance of traffic and TMP, quality assurance management, and public outreach from our office in Alexandria, Virginia. The project included full-depth patching of concrete pavement; asphalt overlay; and roadway/geomeric, drainage, and utility improvements. Volkert developed ITS, signing, striping, sign illumination, and roadway lighting plans including the replacement of existing loop detection with non-intrusive traffic detection units at 45 locations and completion of a sign inventory.

Working closely with the contractor, Volkert provided an analysis of constructability, traffic management, and safety issues for this high-volume traffic facility; and the design and implementation of concurrent design and construction including complex phased construction and sequencing plans.

The design-build team worked collaboratively to plan an aggressive, integrated design and construction CPM schedule which included concurrent design and construction activities to maximize efficiency and flexibility. Design and construction were divided into 7 work packages. The first 2 packages included concrete slab on grade repairs and concrete median and roadside barrier modifications. During construction of the first 2 packages, Volkert obtained approval of the ITS plans and completed design of the 2 work packages for paving and guardrail adjustments. Drainage design was divided into 3 work packages and maintenance-of-traffic was divided into 4 work packages. The organization of the work packages provided greater flexibility with one work package not having an impact on the construction of other work packages. The work packages were quickly approved by VDOT based on Volkert’s proactive approach, design quality, and compliance with VDOT requirements.

Volkert’s design helped to accelerate construction with the use of a temporary precast modular patching system and an innovative metal grate adjustment collar system which allowed the contractor to work longer hours and accomplish more work each night. Weekly scheduling meetings and planning 3 weeks ahead also helped to keep construction ahead of schedule.

The project is located on a high-speed interstate with high traffic volumes and was constructed within very limited right-of-way. Volkert developed a Transportation Management Plan involving a study of traffic and crash data and an operational-level traffic analysis to determine the best variety of construction phasing and temporary traffic control techniques to meet the construction schedule while maintaining traffic flow and safety. Various management strategies and alternatives to detours and lane closures were analyzed. Due to very heavy traffic volumes, construction was conducted mostly at night. Work on ramps was accomplished in a separate phase with partial ramp closures and detours.

Volkert’s work included the development of a public outreach plan in compliance with FHWA requirements. Volkert provided on-site field quality assurance services to confirm that construction, material testing, and sampling performed by the design-build QC inspectors complied with the VDOT Design-Build Manual and the approved construction plans and specifications. Key responsibilities involved the development and implementation of a QA/QC plan, independent assurance testing for comparison with the QC inspectors’ testing, detailed documentation of construction activities and verification of compliance to federal ARRA requirements, resolution of non-conforming work, and monitoring of work zone safety and traffic control.

The work was performed in Volkert’s Alexandria, Virginia office.